

# small air forces observer

vol. 38 no.3 (151)  
January 2015

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**North Korean People's Air Force at War: Part 13**

**INTERFET Aviation in East Timor**

**Junkers Ju86K in Chilean Service**

**Ethiopian Air Force until 1936**

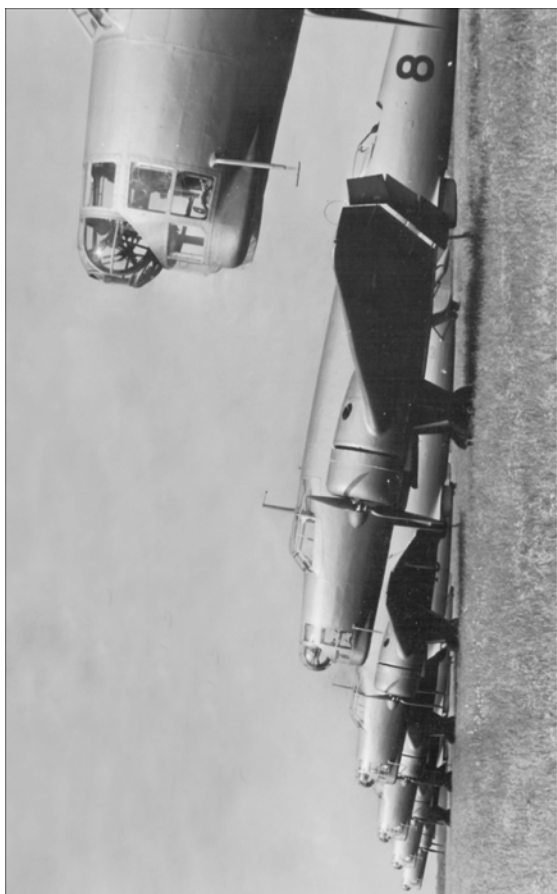
**Meindl/van Nes A-VII (M7)**

**Bolivian Junkers F-13**

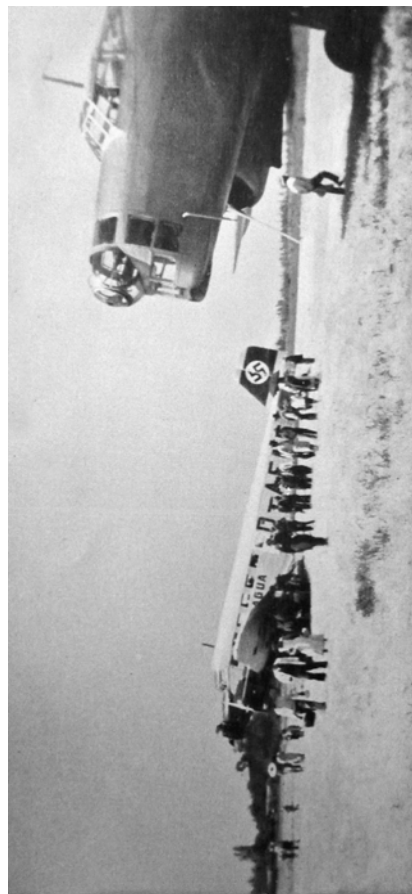
**Exotic Birds (Part 1)**

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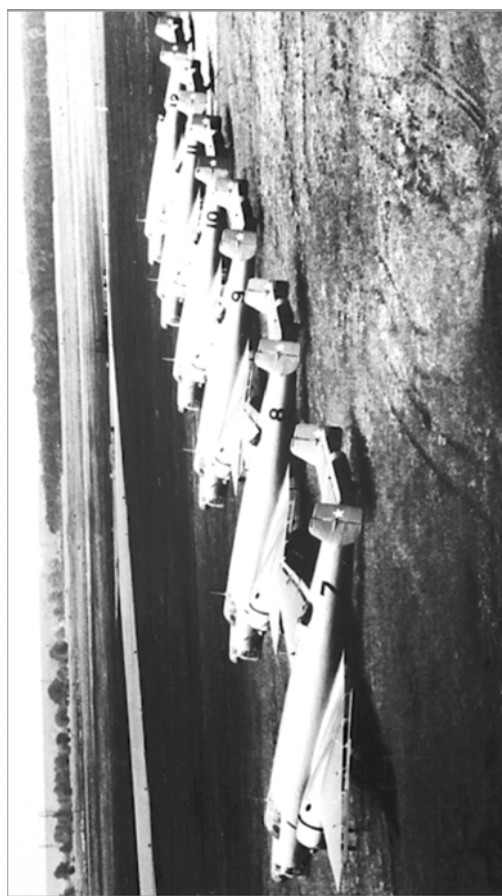
Chile ordered 12 Junkers Ju86K bombers. They arrived in 1938 and were serialled 1-12.



A Ju86K of the Chilean military aviation with a Ju52 of the Deutsche Luft Hansa at Santiago, Chile.



Nardi trainers together with Ju86K and other planes during an air parade.



Six Ju86K of the Chilean Air Force in the first years of their service.

**The Junkers Ju86K & Ju86Z in Chile**  
**The text begins on page 77 and the photos continue on page 81**  
**All photos from the author's collection**

# SMALL AIR FORCES OBSERVER

## The Journal of the Small Air Forces Clearinghouse

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**COVER COMMENTS:** KPAF MiG-15bis "Red 1032" in the Pyongyang "Victorious Fatherland Liberation War Museum". The placard reads: "Fighter Plane 1032: During the Korean War, this plane flew over the East Sea off the coast Hamhung and Ryunpo. The plane had an impressive record of shooting down seven (solid red stars) and heavily damaging three (red outline stars) enemy fighters in just one month." No pilot's name is mentioned. (Author's Collection)



Mozambique Noratlas w/ flag insignia on nose. (Kozak)



Mozambique Air Force's new insignia. (Kozak)



Mozambique Cessna 337 w/ new insignia. (Kozak)

**AUSTRALIA**

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(APMA, PO Box 51, Strathfield, NSW 2135; 4 issues airmail A\$40. International payment is best handled via Paypal at [iansharyn@bigpond.com.au](mailto:iansharyn@bigpond.com.au)). Web Site: [www.apma.org](http://www.apma.org). All articles have b&w or color photos and excellent scale drawings.

**2-14** (28 pages) "Auster J4 Archer, VH-AET" 4 pages inc. 2 photos and 2 pages of multi-view scale drawings. "Fairchild (Bristol) Bolingbroke" 2 pages inc. one page of 3-view scale drawings.

**3-14** (28 pages) "Dutch KDC-10 Tanker Transports" 7 pages inc. 5 pages of multi-view scale drawings. The remaining pages are devoted to the Canadian Ram tank.

**AUSTRIA**

**ÖFH NACHRICHTEN** (Österreichische Flugzug Historiker, Pfenninggeldf 18/2/14, A-1160 Wien. Write for free sample.

**4/14** (44 pages) Nothing of small-air-force interest.

**CZECH REPUBLIC**

**Revi** back issues are available from SAFCH Sales Service: \$5.00 per issue plus postage.

**FRANCE**

**AVIONS:** Toute l'Aéronautique et son Histoire (Lela Presse, 29 rue Paul Bert, 62230 Outreau, France. 71 euro for 6 issues). Website: [www.avions-bateaux.com](http://www.avions-bateaux.com). E-mail: [contact@avions-bateaux.com](mailto:contact@avions-bateaux.com).

**#200 Juillet/Aout 2014** (96 pages) "1914: La France Invente le Combat Aérien" 20 pages inc. 36 photos & 6 color profiles (Blériot XI-2, MF 11, Blériot blindé, MF 20, MF 7, & Voisin LA). "Mitsubishi Ki-46 Dinah (Part 4)" 20 pages inc. 34 photos & 17 color profiles. "Les MiG-29 Fulcrum au Pérou" 11 pages inc. 24 photos and table of individual a/c. "Le Tupolev Tu-95 Bear" 12 pages inc. 32 photos. "Junkers K 47, l'Ancêtre du Stuka" 7 pages inc. 18 photos, 2 color 4-views (SE-ADL & D-2284 w/ red swatika wing insignia, & 3 color profiles w/ Luftwaffe insignia. , "Charles Paoli, de la Campagne de France à la Guerre d'Indochine" 17 pages inc. 23 photos & 3 color profiles (Boston

IIIA, B-25J, & ACC 1 Toucan). "Pionniers: Le Caudron Type B" 2 pages inc. 4 photos & 3-view drawing.

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**GERMANY**

**FLIEGER REVUE X** (Verlag Fliegerrevue, Herrn Detlief Billig, Oranienamm 48, D-13469 Berlin. 4 issues per year, \$66 surface. Payment by check drawn on German bank)

**#48** (114 pages) "Die Taube – das erste Serienflugzeug." 22 pages inc. 52 photos & contemporary scale drawings. This issue also contains the pages from which a 1/50-scale paper model of the Taube can be built. "Tiefflug gegen Tokio" 12 pages inc. 17 photos & a great map of the Pacific Theater at the time of the B-25 raid on Tokyo. "Flog die Me 262" 32 pages inc. 37 photos, 3 color profiles, one color 2-view, and graphs and diagrams of aerodynamic data. "Shooting Star – der erste US-Einsatzjet" 18 pages inc. 18 photos & 5 color profiles. "Zlin-326A darf wieder fliegen" 14 pages inc. 23 photos of Zlin in East German and German civil registration, "Das hölzerne Riesen-Flugzeug und ein Superhanger" 6 pages inc. 6 photos of an Oregon museum with the Spruce Goose and other rare a/c. "Turkish MS.406" 2 pages inc. 8 photos, one color profile, & table of individual a/c.

**IPMS Deutschland Journal.** Website: [ipmsdeutschland.de](http://ipmsdeutschland.de). All color. Subscription: Europe 36 € others 40 € **47/2** 2014 (32 pages). Nothing of small-air-force interest.

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**Maggio 2014** (100 pages) "Roll-out del primo M-346 per Israeli" one pages inc. 3 photos. "FIDAE 2014" 4 pages inc. 12 photos (Chilean AF Learjet, Twin Otter, & C-130) and Argentine IA-53 Pampa). "Incidenti Militari" one page inc. 4 photos (Madagascar Humbert Tetras; Thailand Aero L-39ZA; & India C-130J).

**Giugno 2014** (100 pages) Color photos (Croatia MiG-21bis; Iraq F-16; Israel C-130J; & Australia C-27J).

**Luglio 2014** (100 pages) "Incidenti Militari" one page inc. 4 photos (Colombia Beechcraft B200 Super King 'PNC-0225' & Ukraine Mi-24VP w/ white identification bands.

**Agosto 2014** (100 pages) "Fuerza Aerea Ecuatoriana" 6 pages inc. 21 photos (Super Tucano, Cheetah, A-37, 727, Falcon 7, Cessna 150L, Diamond DA20, Kfir, BAe 748, Cessna T206, Bell TH-57A, & Mirage 50). "Incidenti Militari" one page inc. 5 photos (RAAF CT-4, Russia Sukhoi T-50, Austria OH-58, El Salvador T-35 Pillan, & Iran Su-25). Ukraine losses [Mi-8, An-30, Il-76, Su-25 (3), Mi-8, & Su-27],

**Settembre 2014** (100 pages) Photos (Bolivia Harbin H-425, Mexico King Air, Mozambique Mig-21, & Afghan Mi-17). "Incidenti Militari" one page inc. 5 photos (Macedonia Mi-17, Ukraine An-26, Cambodia Harbin Z-9, Iran F-4E, & Ukraine Su-25M). Other Ukrainian losses: three Su-25.

**USA**

**IRANIAN AVIATION REVIEW** Top Kit Publishing. Quarterly. Entirely in English. \$12.00 per issue. [www.iranianaviation.com](http://www.iranianaviation.com).

**#10** (36 pages) "The Congo Mission" 9 pages inc. 17 photos (mostly F-86) and 2 maps. "Lockheed T-33/RT-33" 8 pages inc. 22 photos & 6 color profiles (4 T-33 & 2 RT-33). "Timeline of Aviation in Iran: Part 10: Aviation in Persia between the Wars – Four new types" Praga E-114 Air baby: 2 pages inc. 3 photos. RWD-13: one page inc. 3 photos. Curtiss Fledgling one page, inc. 2 photos & a color profile. DH.89M Dragon Rapide: 3 pages inc. 5 photos and a color profile.



# The Junkers Ju86K & Ju86Z in Chile

Santiago Rivas

*The Junkers Ju86 became the first modern bombers of the Chilean Air Force and the first modern passenger aircraft for the national airline, serving from the mid thirties till the end of World War 2.*

With the aim of modernizing the Chilean Air Force (Fuerza Aérea de Chile, FACH), created in 1930 as Fuerza Aérea Nacional, in 1932 Junkers offered a military version of their new Ju52/3m, called K45/3m, to replace the R42, but the offer was rejected by the Chilean authorities. Later, on 9 October 1935, commanders Manuel Francke and Luis Bassaure, and Captain Raúl González went to Germany to learn about the aeronautics industry from that country; returning to Chile on 24 December of the same year. No purchases were made at that time, but they learned enough to make plans for what should be bought, the price, and the technology of the planes offered for sale.

Regarding the bombers, the plan issued on 16 January 1937 was to acquire fifteen planes of two or three engines, with three or four machine guns, preferably two of 12.7mm and two of 7.7mm, with capacity to use vertical cameras. Also to be acquired were five cameras, oxygen systems, and radios.

However, no purchases took place at that time. In March 1937, another group of officers went to Germany. This group was headed by the Commander in Chief of the FACH, General Diego Aracena, with commanders Julio Maldonado and Galvarino Molina, Captain Luis Massa and Lieutenants Alejandro Schwerter, and Vicente Alzerreca. They were to look for new material to equip Chilean combat aviation, which had become obsolete.

After visiting Germany, they went to Italy and then to Denmark. They decided to purchase the Italian attack planes Breda Ba-65 and Nardi FN-305 trainers. While in Germany, they bought twelve Junkers Ju86K bombers for a total of 286,800 US dollars, nine Arado Ar 95s for 139,099.50 dollars, and fifteen Focke Wulf Fw 44J trainers for 32,700 dollars. On their return to Chile, President Arturo Alessandri P. signed the Supreme Secret Decree No 636, on 14 September 1937, authorizing the purchase of the planes.

The Chilean Ju86K, serialled 1 to 12, were assigned to the Grupo de Bombardeo at the airbase El Bosque near Santiago. They replaced the older Junkers R42 in the bombing missions. (For the story of the Chilean R42 see SAFO #148)

The Chilean Ju86K were equipped with three Madsen Model 1937 machine guns of 7mm calibre and

a batch of Rheinmetall-Borsig bombs of 250 kilos had been purchased. The Chileans asked that the Ju-HPC-III propellers, ground-adjustable up to 10°, be replaced by propellers ground-adjustable up to 20° and with Hamilton regulators that made possible the automatic control of the revolutions. Only Junkers 4 and 12 were delivered with this change; the others received the new propellers in Chile. One curiosity was that the landing lights were eliminated because the Germans thought that using the lights during a night landing would reveal the location of their home airfield. Also, eight Chilean Ju86K were equipped with Telefunken Stat-274-iF radios and P-63-N radio compasses, so the FACH decided to purchase from Telefunken the pieces and cables to equip their other Ju86K, but the radios and radio compasses were not purchased.

After the flight tests made in Germany by Chilean Air Force personnel with the support of the Germans, on 16 May 1938 the Ju86K were officially accepted. The planes were disassembled and sent to Chile on the steamer Imperial which sailed on 10 June 1938; arriving in Chile soon after that. The last batch, with the Junkers serialled 10, 11, and 12, left Germany on the ship Dresden on 30 June. Before the end of July, all the planes were in Chile.

That same month, flight tests began at El Bosque Air Base. They were finished in September. All test flights were made by Hans Matthies as pilot with Osterland and Wurmseer mechanics; all from Junkers factory.

Meanwhile, on 13 July, a commission was created to test the planes for their acceptance by the Escuadrilla de Bombardeo (Bombing Escadrille) of the Chilean Air Force. This group consisted of Group Commander Ragael Sáenz, Lieutenants Ignacio Román and Fernando Fagalde, and the civil aeronautical engineer José Gómez who was contracted for the work. After the evaluation of all the planes on 16 September 1938, the twelve bombers were officially assigned to the Grupo de Bombardeo, which then became the Grupo de Aviación N°1. The three Germans stayed for two extra months training Chilean personnel.

Despite being new, immediately after their entry into service the planes showed a lot of problems with the engines, limiting their operational status. Engineer

Karl Warch, who was contracted to put the Junkers R42 in service, was again required to find a solution for these problems.

With the arrival of the Ju86K, the R42 were relegated to secondary tasks and they were finally retired in 1941.

### **Ju86Z for the Línea Aérea Nacional**

While the Ju86K were arriving, the Línea Aérea Nacional (LAN), owned by the Chilean Air Force, decided to buy four additional planes of the Ju86Z version for passengers. The first two, serialled CC-220 and CC-221, arrived by ship in December 1938; followed soon after by CC-222 and CC-223.

On 23 January 1939, a big earthquake hit the cities of Chillán and Concepción in Chile, leaving thousands of people affected. The government immediately organized an air bridge to bring relief to the region. These operations started on the day following the 'quake. Both models of Ju86 were utilised as well as many other planes including R42 serials 1 and 3. On 25 January, Ju86Z CC-221 of LAN was destroyed in an accident at Hualpencillo airfield at Concepción.

On 26 January, Ju86K serialled 7, under the command of Teniente 1° Oscar Yáñez, crashed while landing at Soledad airfield near the town of Linares. The plane was carrying doctors and 500kg of medical equipment to the town of Cauquenes, but while they were landing the wind changed. The pilot attempted to take off again, but the runway was too short and they hit a tree. Damage was estimated at 70%. After analyzing the wreckage, it was written off on March 17 1939 with only 55:25 total flying hours.

After the emergency, the Ju86Z started passenger flights for LAN bringing a significant improvement in speed and quality of flights; especially since the Ju86Z were capable instruments flying in bad weather.

On 14 March, during a flight between Iquique and Arica, CC-220, commanded by Héctor Lopehandía, the pitch mechanism on the starboard propeller failed. Lopehandía stopped that engine and tried to continue flying on only one engine, but that one started overheating. The aircraft began losing altitude, so the pilot decided to make an emergency landing near Pampa de Camarones in the Atacama Desert.

While landing, the right landing gear hit a rock and broke off. The left landing gear failed soon after, stopping the aircraft. The pilot and the three passengers on board were uninjured. The plane suffered damage to the fuselage, right wing, flaps, bent propellers, and

broken landing gear. It was written off. At the time of the accident the plane had 171:47 flying hours.

### **A costly trip**

In recognition of the assistance Argentina had contributed after the big earthquake, on 22 May 6 1939, Chilean Ju86K departed for El Palomar Military Air Base near Buenos Aires to take part in an Air Parade celebrating the anniversary of the May Revolution in Argentina (which determined the independence of the country). The aircraft were serials: 1 (commanded by Captain Washington Escobar), 2 (Captain Enrique Bryers), 4 (1st Lieutenant Oscar Yáñez Santana), 8 (Captain Alberto Latorre), 10 (Commander Agustín Riveros, Commander of Grupo 1), and 12 (1st Lieutenant Rudy Geiger Stahr). The formation was under the command of the Escadrille Commander, Agustín Riveros. A stop was made at the Argentine city of Río Cuarto, after which they were escorted to El Palomar by an escadrille of Argentine Curtiss Hawk 75-O.

On the 30<sup>th</sup>, the Ju86K started the return trip with a stop at Mendoza before crossing the Andes Cordillera. While landing at Mendoza, plane 2, commanded by Captain Byers, burst a tyre forcing it to remain at Mendoza while the tyre was changed.

During the rest of the day, the crews waited for the weather in Chile to improve where there was a heavy overcast around the city of Santiago and their airbase at El Bosque. Finally, they received the information from El Bosque that the mist had gone. The planes took off and headed for the Cordillera, but the mist had only disappeared over El Bosque; the whole central valley of the country was still completely covered. Five planes departed between 1630 hours and 1715 hours, crossing the Cordillera individually and arriving over the Maipo River valley in the late afternoon to find the whole area covered by very low clouds. The dim afternoon light made it even more difficult to search for the base. A return to Mendoza was not possible, as they would have to cross the mountains in the middle of the night.

Captain Alberto Latorre, in plane 8, made it to El Bosque by descending very quickly and turning north until reaching El Bosque where he landed without problem. Plane 10 headed south and landed on a field with only minor damage. (Plane 10 was recovered, but it was retired from service and used as spares.) Plane 12 made a landing at Puente Alto, suffering only slight damage to the fuselage and wings. (On 11 June, it was able to return to base.) Plane 4 landed without problems near Nancagua on a muddy field and experienced little

damage. It returned to El Bosque some days later. Finally, plane 1 landed on a small rocky island on the middle of a river near Lontué and received heavy damage. The crew was rescued the following day. Recovery of the plane was not possible and it was written off.

As a result of these accidents, the fleet was reduced to nine Ju86K of the Chilean Air Force and two Ju86Z of LAN - only one year after their arrival. Commander Riveros was removed from his duties, and Commander Enrique Nuñez Morgado became the new commander of the unit.

Soon after that, in June of the same year, the Ju86K were sent to the airfield at Alto Hospicio, at Iquique in the north of the country. Meanwhile, mechanical problems continued, and on 18 February 1941 the command of the Air Force was informed that the BMW 132Dc. engines were failing again despite modifications made in the country.

### **The end of service in Chile**

On 6 February 1941, plane 4 was sent to Temuco, in the south of the country, for a photo survey of Malleco province on behalf of the Land Management Ministry. On 11 February, since some terrain was not easily identified, it was decided to land at the runway of the Húsares de Angol Chilean Army Regiment. During the takeoff, under command of 1<sup>st</sup> Lt. Oscar Yáñez, the port engine failed and a forced, wheels-up landing was made, which ended with the plane on fire and completely destroyed.

Pilot 1<sup>st</sup> Lieutenant Óscar Yáñez, his two crewmen, and three passengers received minimal injuries. The amount of the damage assessed at 90%. Fuel contaminated with water was blamed as the cause, as some foreign material was found in carburettor of the port engine. The Junkers had 316:19 flying hours.

Shortly after that and because of the lack of spares caused by the war in Europe, LAN transferred their two Ju86Z to the Chilean Air Force who reserialled CC-222 as 901 and CC-223 as 902.

The accidents continued. On 15 September 1942, plane 11 was lost at El Tuqui airfield in Ovalle. Shortly after takeoff, the starboard engine failed. The pilot, Lt Ignacio Román, attempted to land on a pasture close to the airfield. As soon as the Ju86 landed it caught fire. One of the four crew members perished. The remaining crew members suffered only minor injuries.

The plane was one of four operated by Grupo 1, Bomber Sqn. 1 coming to Santiago to participate in an Air Parade on September 19 celebrating the day of the Chilean Army. The investigation determined the

destruction was 90%. On the salvage documents, it was mentioned the Junkers had the manufacturer's constructor number 860343. The bomber was officially struck from Chilean AF service on June 12 1943.

Because of the constant problems with the BMW engines of plane 902, they were replaced by two Pratt & Whitney Hornet. Spare parts for this engine were plentiful since by this time Chile had joined the Allied in the war. Because of this, 902 was the most available of the Ju86 fleet.

During 1942, the Ju86K received new serials, becoming 802, 803, 805, 806, 808, 809, and 812. During 1943, operations were reduced, mainly because of the lack of spares and the problems with the engines. Most of the seven remaining Ju86 were out of service.

By April 1943, the Grupo de Aviación N°1 had Ju86K serialled 802, 806, 808, and 809 operational. Planes 803 and 805 were being repaired at the unit, and 807, 810, and 811 were at the Maestranza Central de Aviación, the main workshops of the air force. Also, the unit had Ju86Z 901. By 1944, 902 was sent to the Escuadrilla Comando en Jefe for VIP flights, and the others to the Grupo de Aviación N°1.

After an earthquake in the Argentine city of San Juan on January 1944, 901 was sent to help with the relief operations. On 16 January, 901 piloted by Captain Rudy Geiger and carrying eight doctors and medical supplies took off from Santiago's Los Cerrillos airport heading across the Andes Mountains for Mendoza's El Plumerillo airport.

Approaching Meddoza, it was impossible for the crew to contact the airport before landing because their radio worked on 50 meters band while Mendoza used 38 meters. During the landing, the Junkers touched down near the halfway point of the runway. While applying brakes, the aircraft left the concrete strip and after 20 meters the left landing gear leg failed. The tips of the propeller, flaps, and engine cowlings were damaged. Damage was estimated at 10%. Subsequent investigation revealed that the brakes of the starboard wheel had not been working properly. The aircraft was recovered to the Chilean Air Force Maestranza Central de Aviación, but it was ultimately written off.

By 1945 there were only three Ju86 in service: 803, 806, and 902. By June an inspection of all of the planes was ordered to be done at El Bosque. Plane 806 was sent for overhaul after which it was returned to its base. Plane 803 was sent to Iquique where it was authorized to operate for an extra 250 hours, with inspections after each 50 hours.

On 31 August, during the graduation of the First Officer's course at the Escuela de Tiro y Bombardeo, the Junkers made a bombing demonstration escorted by four North American AT-6. The formation was attacked by AT-6 defending the base. The Junkers used 12 kilos exercise bombs.

In September 1945, the last Ju86 were grounded and on 6 April 1946, by the Orden de Comando en Jefe N°8, they were finally retired from service. The order was to

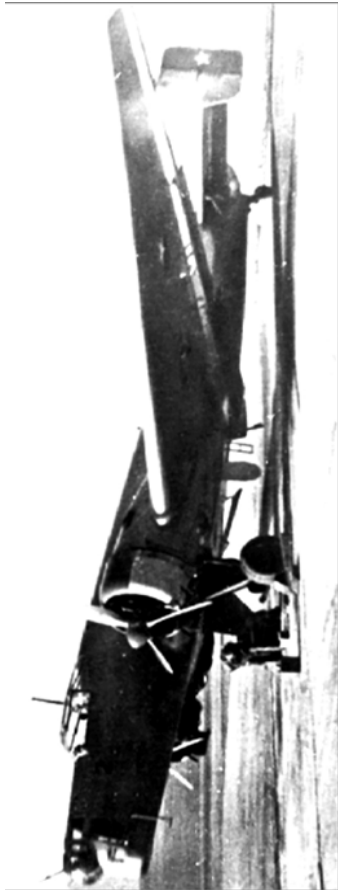
scrap the Ju86K and use Ju86Z 902 for ground training at the Escuela de Mecánica. Although this last plane was still in good conditions, the arrival of the first Douglas C-47 determined its retirement. Finally, in the early fifties, this last Chilean Ju86 was scrapped, ending the story of the type in the country.

Santiago Rivas (SAFCH #1739), Argentina.

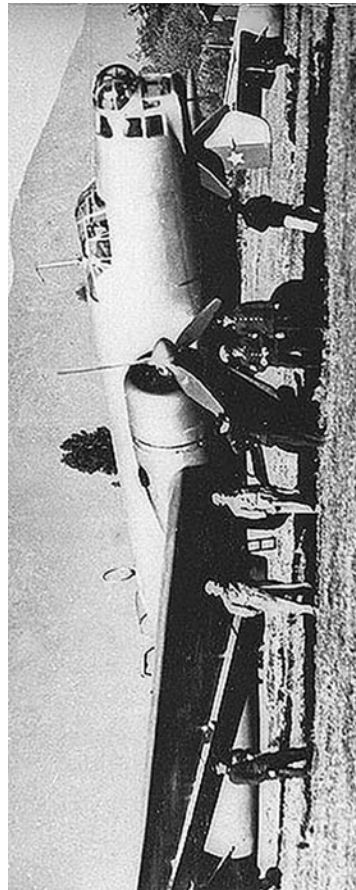
## Junkers Ju86 in Chile

Model	Serial	Enlisted	Retired	Notes
Ju86K	1	16-9-38	30-5-39	Accident while returning from Buenos Aires, after an emergency landing on a small island near Lontué.
Ju86K	2, 802	16-9-38	1945	Scrapped.
Ju86K	3, 803	16-9-38	6-4-46	Scrapped.
Ju86K	4	16-9-38	2-41	Accident after taking off from Angol, written off.
Ju86K	5, 805	16-9-38	1945	Scrapped.
Ju86K	6, 806	16-9-38	6-4-46	Retired from service by Orden del Comando en Jefe N°8. Scrapped.
Ju86K	7	16-9-38	26-1-39	Accident near Linares during the relief operations after the earthquake.
Ju86K	8, 808	16-9-38	1945	Scrapped.
Ju86K	9, 809	16-9-38	1945	Scrapped.
Ju86K	10	16-9-38	1939	Accident while returning from Buenos Aires, after an emergency landing, written off and used for spares.
Ju86K	11	16-9-38	9-42	Accident at El Tuqui aerodrome, at Ovalle.
Ju86K	12, 812	16-9-38	1944	Accident while returning from Buenos Aires, after an emergency landing, repaired on the place and returned to service. Later retired and scrapped.
Ju86Z	CC-220	12-38	14-3-39	Received by LAN. Accidented at Pampa de Camarones on the Atacama Desert and written off.
Ju86Z	CC-221	12-38	25-1-39	Received by LAN. Accident at Hualpencillo aerodrome at Concepción, during the relief operations after the earthquake.
Ju86Z	CC-222, 901	1-39	16-1-44	Received by LAN. Transferred to the FACH in 1942. Accident at Base Aérea Militar El Plumerillo, Mendoza, Argentina, during the relief operations after the earthquake on the city of San Juan.
Ju86Z	CC-223, 902	1-39	6-4-46	Received by LAN. Transferred to the FACH in 1942. Received Pratt & Whitney Hornet engines. Retired from service by Orden del Comando en Jefe N°8. Used for ground training for some time at the Escuela de Mecánica of the FACH. Scrapped on the early fifties.





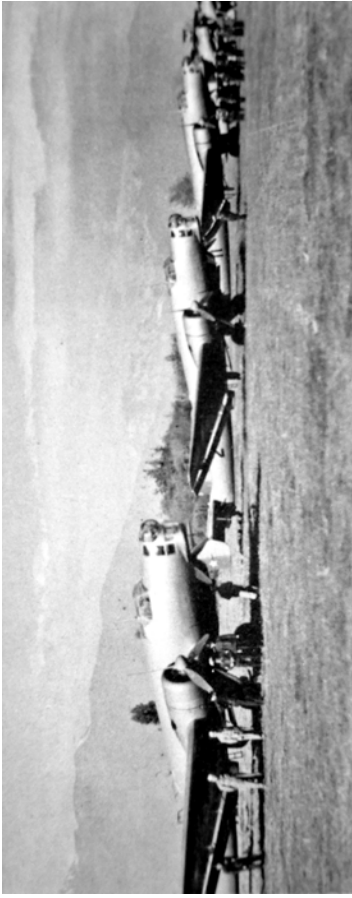
Ju86K serial 2.



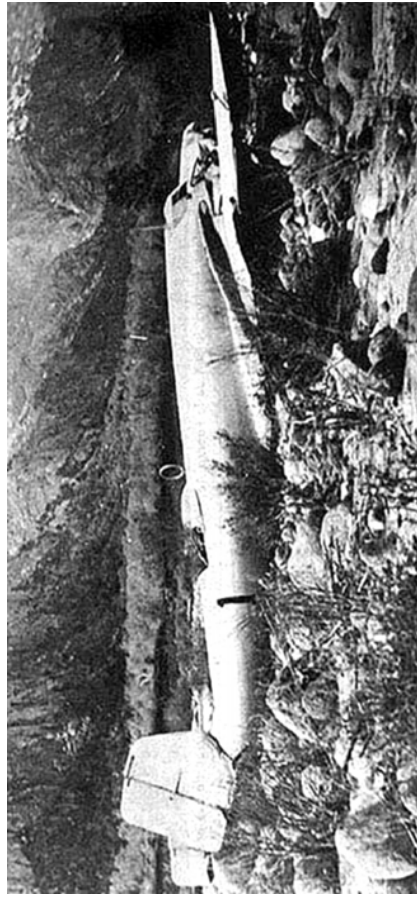
A Ju86K at El Bosque.



Chilean Air Force officers in front of a Ju86K.



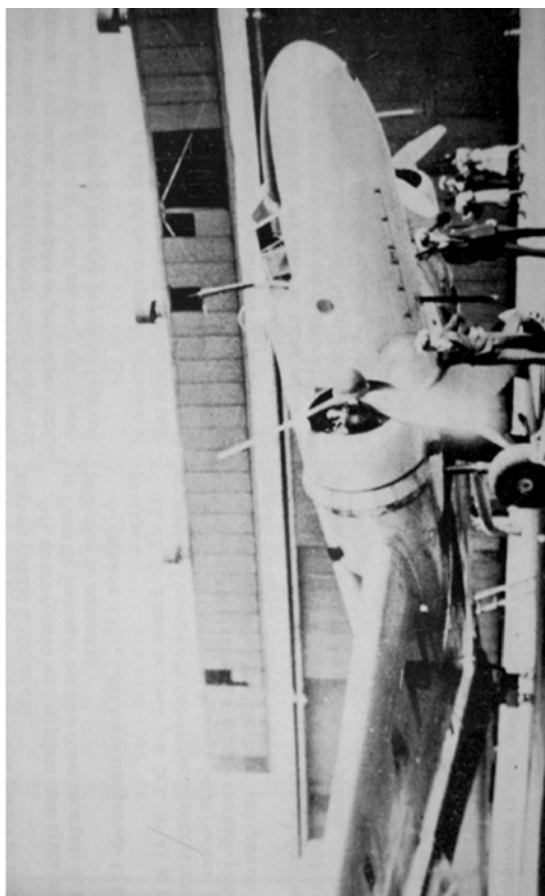
Chilean Ju86K bombers at El Bosque.



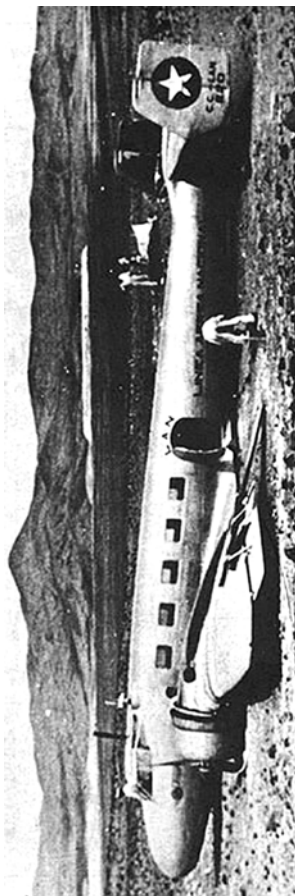
Ju86K 1 crashed on its return from the good-will flight to Argentina in May of 1939. The Ju86K 1 landed on a small, rocky island in the middle of a river. The recovery of the plane was not possible and the plane was written off.



On 6 February 1941, Ju86K 4 forced landed on a muddy field near Nancagua.



The Línea Aérea Nacional (LAN), operated by the Chilean Air Force, purchased four civil Ju86Z in 1938. Serials CC-220 - CC-223.



On 14 March 1939, during a flight between Iquique and Arica, CC-220, made an emergency landing in the Atacama Desert. Damage was so extensive that it had to be written off. The insignia on the vertical fin of the civil Ju86Z was a blue and red roundel with a white star inscribed inside the blue inner portion.



One of the LAN Ju82Z.



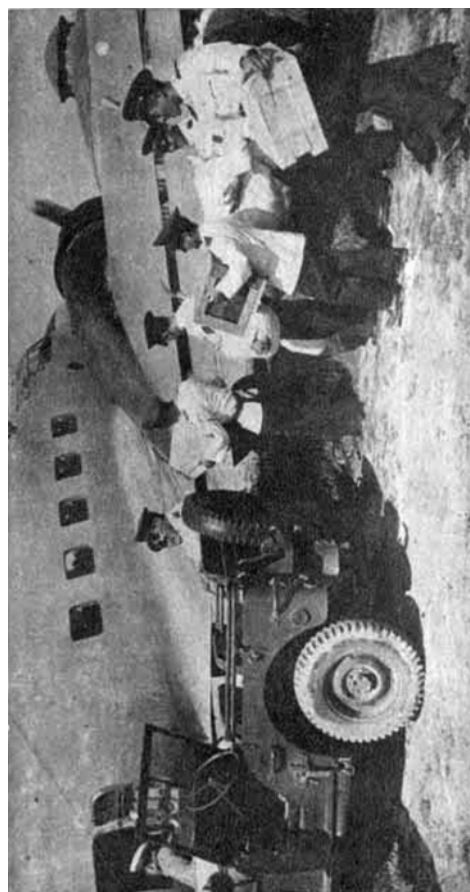
CC-222 after a minor accident at Cerro Moreno.



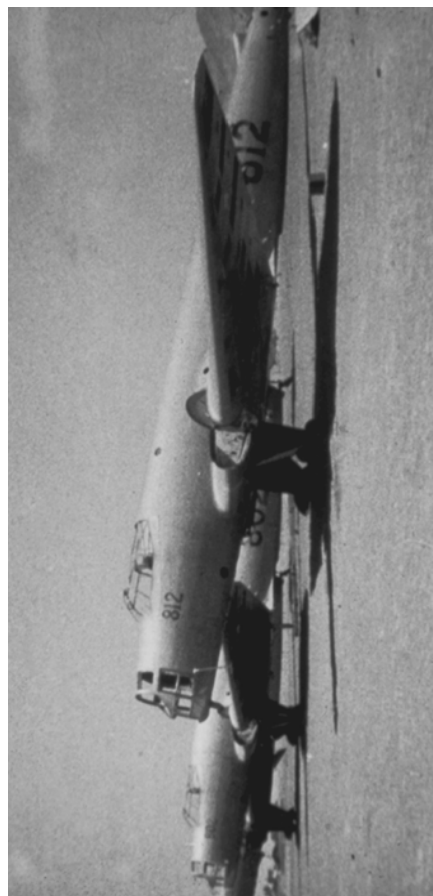
Because of the lack of spares caused by the war in Europe, LAN transferred their two remaining Ju86Z CC-222 and CC-223 to the Chilean Air Force. They were reserialled 901 and 902 respectively.



Ju 86Z 901 ran off the runway at Mendoza, Argentina, while landing with relief supplies for earthquake victims at San Juan, Argentina.



Ju86Z 901 being loaded with relief supplies for San Juan, Argentina, after the Argentine city an earthquake in January 1944.



In September 1945, the last Ju86 were grounded and on 6 April 1946 they were finally retired from service.

# The Korean People's Air Force

in the Fatherland Liberation War

Part 13: More Fighting at Night

Douglas C. Dildy

## Battle of Night Fighters

During late December 1952 and throughout January the Soviets' night fighters (See Note 1) enjoyed a number of successes against FEAF's B-29 medium bombers as they attempted to destroy North Korean railway supply lines. On 30 December, under a full moon and aided by an "airborne attack coordinator", four Soviet MiG-15s (351<sup>st</sup> OIAP and 1<sup>st</sup> Eskadra/535<sup>th</sup> IAP) intercepted a trio of night bombers (19<sup>th</sup> BG), shooting down one and damaging the other two so badly that they force-landed at Suwon AB and were consigned to "depot reclamation" (DBR, used as spare parts sources). On the night of 10/11 January, during an attack on the railway marshalling yards at Anju, one Superfortress (307<sup>th</sup> BG) was damaged by both AAA and MiGs, forcing the crew to bail out near Pyongyang. Two nights later, while the 1<sup>st</sup> Eskadra of 535<sup>th</sup> IAP engaged a "stream" of six Superfortresses bombing the railroad marshalling yards at Sinanju, a lone RB-29 (92<sup>nd</sup> SRS), ostensibly on a leaflet dropping mission along the Yalu, was reportedly attacked by a dozen MiG-15s (351<sup>st</sup> IOAP), the crew abandoning the doomed aircraft at 2316hrs. On the night of 28/29 January MiG night-fighters silhouetted a Superfortress (19<sup>th</sup> BG) against the full moon and Maj. Anatoliy Karelin shot it down to become the only Soviet night-fighter ace of the Korean War. At the end of the month Karelin attacked a single B-29 (307<sup>th</sup> BG) bombing a supply depot at Unjong-ni and damaged it so badly that a forced landing was made at Suwon where the battered bomber was written off. (Note 2)

Acutely concerned about the continuing B-29s losses to Communist night fighters, by this time, the USAF Chief of Staff, General Hoyt S. Vandenburg, relented on the prohibition against employing the advanced Lockheed F-94B Starfire radar-equipped interceptors beyond the front lines. The Suwon-based (K-13) 319<sup>th</sup> FIS began augmenting the USMC Skyknights, flying "barrier patrols" over North Korea and at the end of January were rewarded with their first "night kill". But instead of being a Soviet MiG-15, the target proved to be a KPAF night raider.

On the evening of 30 January Capt. Ben L. Fithian and Radar Observer (R/O) Lt. Sam R. Lyons were launched to assist another aircraft and headed for Cho-do Island, where another F-94B was having difficulty locating a low altitude target. Fithian later explained, "When we got within about 50 miles [80km] of the activity, Cho-do released the other F-94 for recover at K-13 and took control of us. We were at about 25,000 feet [7,620m]. They started giving us range and direction to the 'hostile'. It was something like

30 miles [48km] away at one o'clock [30° to the right of the aircraft's nose]. They gave us a descent order to 5,000 feet [1,525m] and a series of turns. We end up at 5,000 feet [1,525m] going southeast about ten miles [16km] west of Pyongyang; we were about six miles [10km] behind the hostile who was doing about 130 knots [241km/hr]. We swung behind the target and continued to descend. We made the first radar contact at about five miles [eight km] range.

"In order to get the optimum advantage with our airborne radar fire control system, we descended to tree-top level. It was a moonlight night and I could see the ground under us, but not ahead. Once I looked out and [saw] we were very close over some trees that looked like tall sycamores, so I climbed up a bit. I figured the Korean pilot probably knew the terrain and if he could get through, we could too. Also, the prize of the first 'kill' using the F-94 was worth laying it all on the line. We made radar contact again at slightly less than five miles [eight km] and I slowed it down a bit to about 130 knots [241km/hr]. With speedbrakes extended, after getting a [radar] lock on the target, we started to climb and close. The enemy aircraft was at about 1,500 feet [457m] altitude. We had an overtake speed of about 40 knots [74km/hr] when we got into [gun] range of 1,200 feet [366m].

"I started firing on the radar scope. I fired a long burst and saw no results. We continued to close and I fired again. Still no hits! We were at about 600 feet [183m] behind the target and [when I fired again] I moved the stick around in about a six-inch [15.3cm] circle and saw some flashes. We were armed with API [armor piercing incendiary ammunition] – they made a flash upon impact. As soon as I saw a lot of flashes, I held the stick steady and continued to fire. Our .50-caliber rounds were devastating to the target, as it immediately burst into flames and nosed straight down. The light provided by the ball of fire and low altitude gave us a lasting image. The aircraft hit the ground in seconds with the cockpit still closed. We identified it as a Lavochkin..."

"We called 'splash one' and Cho-do gave us a vector towards another hostile about eight miles [13km] away. We were low on fuel [and] our altitude was very low and we ran into some intense ground fire, [so I] climbed out..."

Officially recorded as a "prop" in the USAF official Korean War victory rolls, the destroyed Lavochkin is most often reported to be an La-9. However, considering the fact that only the ADF- equipped La-11 was used by the

KPAF for night operations, it most likely was one of that type, assigned to the 3<sup>rd</sup> Night Bomber Regiment.

### **KPAF 3<sup>rd</sup> Bomber Regiment Returns to Combat**

Having weathered the severe Korean winter, Pak Den-Sik's night raiders – now increased to three battalions with the addition of the former-56<sup>th</sup> GFAR La-11s – resumed combat operations. (Note 3) The first target on their “hit list” was the 608<sup>th</sup> AC&WS tactical air direction center (TADC) on Cho-do Island. A constant “thorn in the side” of Soviet and UAA MiG-15 operations (both day and night) and an impediment to any renewed night bombing campaign, the TADC's SCR-270 radar needed to be neutralized if possible. Beginning on 4 April, four 76mm guns began shelling the island, and nearby Sok-to, concentrating their bombardment on the small town of Sosa-ri, killing two and wounding 20 Korean civilians. The first two nights' barrages totaled some 520 rounds, but afterwards the bombardments slacked off in volume and intensity, still raining 10-60 shells onto the islands about every other night.

On 15 April, the KPAF launched its renewed operations with a fairly large raid (number and types of aircraft as yet unknown) against the Cho-do TADC site, continuing its bombing attacks for two hours. Very little damage was done – and none to the radar unit – but bombs falling among the 608<sup>th</sup> AC&WS bivouac killed two US Army enlisted men and wounded 22. (Note 4)

While newly acquired searchlights and Battery A/933<sup>rd</sup> AAA (AW) Battalion's tracers lit up the night sky, neither could locate the small, slow-flying raiders and none were shot down. The 319<sup>th</sup> FIS scrambled four F-94Bs but the attackers were flying so low that the Starfighters' R/Os could not detect them amongst the “ground clutter” on their AN/APG-33 radar scopes.

The next night Pak's night raiders dropped several thousand leaflets over the Seoul and Incheon areas proclaiming the Communists' “peace desires”. This mission was followed by almost nightly bombing raids – against Kimpo AB, Chunchon, and US Eighth Army frontline troops – by all three types of KPAF night attack aircraft. Several American troops were wounded and a number of Korean civilians killed, but no material damage was done until the night of 23 April when the raiders struck Kimpo AB, damaging five RF-80A reconnaissance jets (45<sup>th</sup> Tactical Reconnaissance Squadron, Photographic-Jet).

Frequently the small, low-flying raiders – because of their low radar “signature” and slow, barely recognizable movement on the radar scopes – were able to sneak in to their targets avoiding radar detection, which completely negated the American advantage of powerful ground-based radars, GCI radio control and radar-equipped jet-powered night-fighters. The attack on Kimpo was the last straw,

causing Fifth AF Fighter Command to break from its long-established air defense command structure and decentralize control of night-fighter operations and air raid warning systems, authorizing individual base commanders to declare air raid warnings and launch locally-based aircraft to intercept the North Korean attackers.

Kimpo AB, for instance, acquired a pair of portly radar-equipped USN Douglas AD-4W Skyraiders (usually used for electronic warfare and airborne early warning) from Marine Composite Squadron VMC-1 at Pohang (Note 5); a 14-gun B-26B Invader; and an machine gun armed T-6G “Mosquito” (normally a forward air control aircraft) which was paired with a C-47 “Firefly” flare-ship, as its local night air defense force. If the base was attacked, these would be launched and flown under the direction of the base's ground control approach (GCA – a unit specializing in “talking aircraft down” to the runway during bad weather situations, not a combat GCI unit). The GCA radars were tied into the 502<sup>nd</sup> Tactical Control Group's air defense network in an attempt to increase its radar coverage and provide a more comprehensive “air picture”.

Additionally, because the GCI radars were located on hill and mountain tops to extend their range “over the horizon” for controlling UNC aircraft operating deep into North Korea, the numerous valleys lay beneath their coverage and provided convenient approach corridors for the small, low-flying KPAF night-bombers, so ten new AN/TPS-1D “gap filler” radars were erected in these locations. Finally, the base had a battalion of radar-directed 90mm AAA guns (68<sup>th</sup> AAA Bn) and another of manually-aimed 40mm automatic weapons [865<sup>th</sup> AAA (AW) Bn] spread around the airfield – the SCR-584 radars of the AAA batteries were also fed into the base's GCA control center for local air defense and the Seoul-based 608<sup>th</sup> AC&WS tactical air-direction center for sector surveillance, in the hopes of contributing to a more comprehensive “air picture” for the air traffic (ATC) and GCI controllers to use in attempting to direct the air base's defense against the elusive and aggravating night raiders.

### **Jets versus Biplanes**

As the nocturnal harassment attacks continued into May, one of the small propeller-driven biplanes showed up on radar northeast of Cho-do in the early morning hours of 3 May and an F-94 Starfire patrolling the area was vectored to intercept. Flown by 2<sup>nd</sup> Lt Stanton G. Wilcox, once the F-94 got low enough for R/O 2<sup>nd</sup> Lt Irwin L. Goldberg to get a radar contact, Wilcox lowered his landing gear and flaps and slowed the big, heavy interceptor to 110 knots (177km/hr) to allow Goldberg to get a radar-directed “firing solution”. Reportedly, Wilcox called “splash one”, indicating that they had destroyed the target, but, it appears that at this point the big Starfire



stalled out and spun into the water. While unidentified wreckage was located floating near the F-94's last known position the next day, the aircrewmembers were listed as Missing In Action (MIA). Because of Wilcox's victorious radio call, he was posthumously credited with destroying an enemy "prop" aircraft. (Note 6)

Due to this loss, Fifth AF restricted the 319<sup>th</sup> FIS from attempting intercepts against enemy aircraft flying below 2,000 feet (610m) or slower than 160 knots (257km/hr). Meanwhile, undaunted by their own loss, the KPAF night raiders continued their nocturnal missions, focusing their attacks mainly on Seoul. Shortly after midnight on 27 May six to eight Po-2LSHs and Yak-18As scattered small bombs and artillery shells over the South Korean capital, rupturing an oil line between Inchon and Yongdungpo. Some of these attacked Kimpo AB where they injured one man and caused minor damage to one F-86 and two RF-80As. In response, the base commander scrambled his C-47 "Firefly" and T-6G "Mosquito" to engage the low-flying light aircraft. However, the C-47's million-candlepower magnesium flares blinded the "Mosquito" pilot and no successes resulted.

A week later three Po-2LSHs attacked Cho-do, dropping eight light fragmentation bombs, but caused no damage or injuries, returning on 7 and 8 June with similar results. On 8/9 June a stream of the "hecklers" flew across Seoul while USAF F-94s searched fruitlessly for them. The next night five small single-engine raiders attacked Psengyong-do, again dropping eight bombs but causing no damage to military facilities. Continuing their nearly nightly attacks into early June, the KPAF raiders repeatedly attacked Seoul, Kimpo, and Cho-do.

While the materiel damage caused by the "Bed-Check Charlies" was negligible, their nearly constant nocturnal attacks were an embarrassment to the USAF and extremely frustrating for Fifth AF Fighter Command. No one felt that more than the commander of the 319<sup>th</sup> FIS, Lt Col Robert V. McHale. Having just been credited with downing at MiG-15 on 8 June, (Note 7) McHale was eager to have a similar success against Pak's "night hecklers". Six nights later, on patrol near Cho-do with R/O Capt Samuel Hoster, McHale was vectored against a slow moving target at 5,000 feet (1,525m). Hoster acquired a radar contact on the target and GCI cleared the F-94 to fire, but evidently in doing so McHale did not recognize his high closure speed and flew into the target, destroying both aircraft and killing himself and his R/O. (Note 8)

### **Send in the Marines**

Anticipating a large ground offensive as the armistice negotiations finally appeared to arrive at closure – the Communists wanted to secure as much territory as possible for North Korea before the cease fire went into effect (Note 9) – the 3<sup>rd</sup> Night Bomber Regiment stepped up its

attacks, especially in the Seoul area. On the night of 15/16 June nine Po-2LSHs and Yak-18As (probably a maximum effort by Pak's 1<sup>st</sup> Battalion operating from Sariwon) "rattled Seoul", some of the raiders dropping their small bombs near the mansion of South Korean President Syngman Rhee and damaging the National Police Station, killing two and injuring eight others. Reportedly AAA shot down one Po-2LSH as it crossed the front lines and Kimpo AB scrambled a USMC AD-4W Skyraider to intercept the raiders' second wave.

The AD-4W was a highly modified Douglas Skyraider normally mounting a powerful, long-range S-band (today's E-band) AN/APS-20A airborne early warning search radar, as well as a number of electronic countermeasures (ECM) systems. For this mission, however, the APS-20 was replaced by AN/APS-31 surface search/navigation radar taken from Martin PBM-3 Mariner maritime patrol flying boats. The S-band (now I-band) APS-31 had a "ground mapping" capability that the "over-water" APS-20 did not, allowing the radar operator to differentiate moving (e.g., airborne) targets from the relatively stationary ground returns. In addition to the pilot, a radar operator and ECM specialist were normally carried in the cramped fuselage, but for this mission only the radar operator would be needed. The increased weight of the radar, ECM gear and additional crewmen resulted in the Skyraider's armament being reduced to two M2 20mm cannon in the wings.

Taking off around midnight, Maj. George H. Linnemeier and CWO Vernon S. Kramer were handed off to "Dutchboy" and vectored to the northeast where Kramer soon made radar contact with a slow moving, low altitude intruder. Linnemeier slowed the heavy Skyraider to 90 knots (167km/hr) as they closed to firing range, Linnemeier destroying the target – apparently a Po-2LSH – with his twin 20mm cannon.

While the loss evidently discouraged the rest of the early morning's attackers, a major effort was mounted that night. Some 15 night raiders – including La-11s – attacked the Seoul area, starting several fires. A pair of Yak-18As dropped four bombs on a POL (petroleum, oil and lubricants) depot at Inchon and started a blaze that consumed 5.5 million gallons (of 9.35 million gallons stockpiled) of petroleum products.

As the numerous raiders flooded local air defences, the increasing volume of ground observer reports added immensely to the numerous radar contact ("plots") reported by AAA batteries, the Kimpo GCA radar and local "gap filler" air defense radars. Confusion reigned as the swamped TADC again scrambled a Skyraider, this one flown by Maj. Robert H. Mitchell, but everywhere they went this Marine crew soon found themselves being fired at by friendly AAA, despite the TADC's repeated orders for the gun batteries to "hold tight". Mitchell finally

managed to locate and attack one of the raiders, but overtaking the slow-moving light plane too quickly, he wisely broke off the attack before colliding with his target.

The next day, Fifth AF did an about face, reverting to its traditional command and control arrangements, removing the local air base commander's authority to control AAA guns, returning these to the TADC. To reduce the number of "unfiltered" radar plots, the AAA radars were removed from the center's network and the GCA radars were only allowed to report aircraft entering their airspace without a proper ATC clearance.

The problem for the Americans was not the air defense radar network, but the type of interceptors being used. While the USAF's jet interceptors proved disappointing, Linnemeier's success was promising, so Fifth AF requested a detachment of Vought F4U-5N Corsair night-fighters from the USN's Task Force 77.

### Final Night Air Battles

For night air defense, at this time each of the four USN carriers operating off the Korean coast embarked a four-airplane/six-pilot night-fighter detachment from VC-3 (USN Composite Squadron Three – Note 10) operating radar-equipped Vought F4U-5NLs (a winterized F4U-5N; L for "low temperatures"). The F4U-5N mounted four M3 20mm cannon and carried a Sperry AN/APS-19A search/intercept radar capable of detecting fighter-size targets within 60° of the nose out to 12 nautical miles (22km) and provided a "firing solution" inside 1,500 yards (1.37km).

The very next day (17 June), 31-year old Lieutenant Guy P. "Lucky Pierre" Bordelon led VC-3's Det D from the USS *Princeton* (CVA-37) to Kimpo AB. After an "inbriefing" on USAF intercept procedures and the Joint Operations Center's (Note 11) "rules of engagement" (ROE) VC-3's "Detachment Dog" flew to Pyongtaek airfield (K-6), a USMC base about 30 miles (48km) south of Seoul that was better equipped to maintain and service the unit's Corsairs.

Hoping to foil the American night-fighters, the KPAF night bomber regiment waited for a dark, moonless night – 29 June – and launched two Yak-18As on a "night heckler" mission. Flying south, the two Yaks were detected over Asan-Man (near Seoul), and Bordelon was scrambled to intercept. The JOC's ROE required a positive visual identification before engaging any intruders.

Bordelon later wrote, "I was launched and vectored on the tail of an unknown aircraft. Closing to point-blank range, I identified the 'bogey' as a Yakovlev 18 with a rear seat gunner who sprayed the area to my left and below me with machine gun fire. I fired my four 20mm cannon and literally blew the Yak out of the sky! Reporting the kill to ground control, I was told that another bogey had popped

up. I was vectored into contact with a second Yak-18 and after reporting 'Enemy' was cleared to fire. Pulling in tight I opened up with my 20mm cannon. I saw the incendiaries begin to burn the aircraft and then an explosion. The aircraft seemed to break into several large pieces, burning furiously. My controller reported the sky 'clear' and directed me to return to the field."

Attempting to match capabilities with the USN Corsairs, the 3<sup>rd</sup> Night Bomber Regiment began using its La-11 night-fighters instead of the vulnerable Yak-18 armed trainers, launching two of them two nights later. Bordelon was airborne on a night combat air patrol (NCAP) when the JOC detected the south-bound intruders. As he later related, "Arriving on station, I reported in and was vectored toward unknown targets. As I maneuvered to come in behind the two aircraft, I identified them as Lavochkin 11 fighters. They were in loose trail formation so I pulled in behind the rear aircraft and gave a 'Tallyho' on the bogeys. I was cleared to fire and targeted one La-11. After two short bursts of cannon fire, it began to burn and dove straight down into the ground. The lead aircraft started to follow the burning aircraft down, and I closed on him and began firing. My target turned left, then right and started to climb as I gave him another burst. With that, he exploded into fire and began falling apart. I followed the largest burning mass down to 500 feet [152m] and saw him crash near my first kill."

There were no reported attacks by "night hecklers" during this period and no further intruders were detected until the brightly moonlit night of 16/17 July when a single La-11 was discovered. Bordelon and Lt (jg) Ralph "Hoppy" Hopson were scrambled to intercept and Hopson initially acquired the target but his AN/APS-19A failed as he was closing in on the "bogey", before he could acquire visual contact.

Vectored to the target as Hopson pulled away, Bordelon later recounted, "I gave a 'tally ho' [visual contact with the target] and reported that the contact was definitely an unfriendly aircraft. JOC gave me clearance to fire just as the enemy aircraft began to bank hard to port. As we passed Kaesong, he suddenly rolled wings level and I gave him a long burst of 20mm HEI [high explosive incendiary ammunition] cannon fire. I saw a wing coming off and pulled left as he blew up with a tremendous explosion. Then, turning right and circling, I could see the bright splash of fire on the ground as the La-11 impacted."

During the June night bombing offensive and the missions intercepted by Borderlon, the KPAF 3<sup>rd</sup> Night Bomber Regiment had lost the last of its Po-2LSHs, two Yak-18s and three La-11s. Except for the fortuitous expedient of incorporating USN night-fighters into its air defense system, the USAF was never able to effectively deal with the KPAF's growing night bombing capability.

In fact, in a “backhanded compliment”, the USAF official history allows that “The [North Korean] ‘Bed-Check Charlie’ crews demonstrated that an air defense system could seldom be perfect.”

Author’s Acknowledgement: The author thanks SAFCH member John Mozolak (SAFCH #1368) for his

generous assistance in aiding my understanding of the US Army AA artillery, various radars employed, and the UNC air defense network used in Korea during this period.

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## End Notes

1. At this time, these included two squadrons of the 351<sup>st</sup> OIAP, 2<sup>nd</sup> Eskada of the 147<sup>th</sup> GvIAP (133<sup>rd</sup> IAD), and the 1<sup>st</sup> Eskada of the 535<sup>th</sup> IAP and 3<sup>rd</sup> Eskada of the 913<sup>th</sup> IAP (both part of 32<sup>nd</sup> IAD), the last two beginning night intercept training during the last months of 1952.

2. These were: 30/31 December 1952: 19<sup>th</sup> BW/28<sup>th</sup> BS 44-62011 (tail numbers of the two DBR B-29s are unknown); 10/11 January 1953: 307<sup>th</sup> BW/372<sup>nd</sup> BS 44-61802; 12/13 January: 92<sup>nd</sup> SRS RB-29A 44-62217; 28/29 January 1952: 19<sup>th</sup> BW/28<sup>th</sup> BS 42-65357; and 30/31 January 307<sup>th</sup> BW, squadron and serial number unknown. Note: the 92<sup>nd</sup> SRS RB-29 was one of four Superforts attached to the squadron from the 581<sup>st</sup> Air Resupply and Communications Wing/581<sup>st</sup> Air Resupply Squadron, a unit specializing in insertion and resupply of special forces/guerrilla units and in conducting psychological warfare. This interception may well have been over the PRC because after the crew bailed out they were all captured (minus three KIA) in China and were not repatriated until 1955.

3. When the 56<sup>th</sup> GFAR transitioned from La-9/11s and Yak-9Ps to the MiG-15bis, the Yak-9Ps were retired, the La-9s were passed to the 10<sup>th</sup> Combined Air Division, and the handful of La-11s were transferred to the

3<sup>rd</sup> Night Bomber Regiment to join the Po-2s and Yak-18s in night bombing/attack operations.

4. Corporal William R. Walsh and Private First Class Herbert Tucker have the sad distinction of being the last US servicemen to have been killed by enemy air attack.

5. VMC-1 was activated on 15 September, 1952, at Pohang (K-3), South Korea, as part of Marine Air Wing One’s Marine Air Control Group 2, conducting AEW and ECM in support of combat operations.

6. Wilcox and Goldberg’s aircraft was F-94B 50-887. Additionally, just before midnight on 6 May, Cho-do was hit again by KPAF night raiders – without damage or casualties – and Battery A/933<sup>rd</sup> AAA(AW) Bn claimed one attacker shot down, but the next morning no wreckage could be found.

7. This victory is not verified in Soviet records, however, it may well be against the PLAAF’s ad hoc night-fighter unit that was formed at Andong earlier in 1953. It consisted of pilots and ground crews and eight La-11s from 4<sup>th</sup> FAR and eight MiG-15bis from 10<sup>th</sup> FAR. This unit was led by Hou Shujun, deputy commander of the 10<sup>th</sup> FAR, who claimed an “F-94 kill” on 29/30 May 1953. However, it appears that Hou engaged

and damaged a VMF(N)-513 F3D-2; the Skyknight (BuNo 127024) was last heard from when requesting landing instructions from Kunsan AB approach control, both crewmen being MIA.

8. McHale and Hoster’s aircraft was F-94B 51-5505.

9. Beginning on 9 June 1953, the penultimate Communist ground offensive was against the II ROK Corps and X US Corps, in the eastern and central sectors of the front. Appearing to have been made for the propaganda value of claiming that the Communists were willing to sign an armistice while “winning” the war, the offensive gained about two miles of territory along an eight mile front at a cost of 16,300 men killed and 81 captured.

10. The VC-3 detachments were Det B – USS *Valley Forge* (CVA-45) until 25 June 1953, Det D – USS *Princeton* (CVA-37), Det H – USS *Boxer* (CVA-21) and Det M – USS *Philippine Sea* (CVA-47) through the end of the war.

11. Once the US Navy became a part of Fifth AF’s air defense system the Seoul TADC was renamed the Joint Operations Center, or JOC.



On 21 June 1955 Captain Lee Um-Yong flew Yak-18A “White 15” – and his back-seater – to Seoul, South Korea. Navigator Lt Lee In-Sung was unaware of his pilot’s intentions and initially objected to being an unwitting part of the defection. However, he soon changed his mind, joined the ROKAF and became an instructor at the ROK Air Force Academy, retiring in 1982 as a colonel at the age of 50. Pilot Lee Um-Yong was a Korean War veteran MiG-15 pilot (2nd FAD) with one “F-86 kill” to his credit. He died of alcohol-related issues as the age of 47. Note the bomb shackles beneath the Yak-18A’s wing center section. (USAF Photos)

# The Ethiopian Air Force until 1936

José Fernandez

[Editor: The following is the translation of a chapter from the book *La Campagne d'Abyssinie: l'Italie de Mussolini a la Conquete de l'Ethiopie* (3 October 1935 – 9 Mai 1936). The translation is by Google and Sandra Schachter, and it is presented here with the permission of the author, José Fernandez.]

After the First World War, Ethiopia bought a few Breguet XIV's on the second-hand market, including a model "Sedan" for the Empress Dowager Zaouditou. When he became Negus (King) in 1930, the young Haile Selassie, keen on modernism, rushed things with the purchase of several types of aircraft specially chosen for their robustness and ability to operate under the harsh Ethiopian conditions. In a vast country such as Ethiopia and in the absence of a real road network, aviation was a godsend: the distance from the northern town of Makalle to the capital Addis Ababa could now be covered in two hours instead of three weeks!

## The Ethiopian Air Force is Born

The Ethiopian air force was born on August 18, 1929, when the first Potez 25, powered by a Lorraine engine, was offloaded at the port of Djibouti and flown to Addis Ababa by André Maillet. (Note 1) The choice of Potez 25 was made by Maillet, who had been hired by the Negus in 1928 to create Ethiopian aviation from scratch. This first aircraft was followed by five additional Potez 25's delivered up to the mid-1930s. Half of the French biplanes were equipped with the Hispano-Suiza engine, while the other half had Lorraine engines. Selling the Potez to Ethiopia posed a significant challenge for the manufacturer. While the Ministry of Commerce could congratulate itself on the successful export, the Ministry of Foreign Affairs was reluctant to face the possibilities of "destabilization" in the region. A compromise that other nations often used was found: the planes were sold through a Belgian exporter for a postal service that did not exist, and were delivered unarmed. However, the sale to Ethiopia of 200 aviation bombs delivered by rail was not impeded.

This embryonic air force officially started on August 29, 1929, under the command of the pilot who delivered the first Potez - André Maillet. Maillet left the position in 1930, and the job was turned over to one of his compatriots, Paul Corriger, a Warrant Officer on leave from the Armée de l'Air. Alongside him was a small staff of other Frenchmen: pilot and flight instructor Vedel, engineer Morel, and mechanics Maignal, Balade, Picager, and Bladet. The role of chief engineer was vested in a German - Captain Weber, who had his own mechanic. Corriger did everything he could to make the small

number of planes under his command into a viable force. (Note 2)

In 1930, the Ethiopia obtained a Farman 190 (Salmson engine) and a Breda 15 (Fiat engine), both official gifts to the new Emperor. In addition, a de Havilland Moth was purchased by Viscount Sibour upon his return from an African cruise. All this material was housed in an old hangar flanked by two small workshops. The same year, flight instructor Vedel opened two flight schools; one in Addis Ababa and the other at Dire Dawa. The flight trainers included the de Havilland and Breda 15. Students were selected from the best native Ethiopians graduating from the European schools in the capital. Promising developments occurred in 1931 with the arrival of Micha Babitcheff (Note 3), a commissioned military pilot from Istres deemed by Corriger to be an excellent pilot. He was followed by Lieutenant Bahrou, commissioned from Saint-Cyr and a graduate of the flying school at Versailles, and Tasfae Mikael, who had reinforced his military license with a civil license obtained from Morane at Villacoublay.

It seems that a third Ethiopian pilot, Ligg Harou Kaba, was trained in France, but we know few details of his career. The record of the local flight schools was less than shiny. We know only a few of the pilots actually trained by Vedel - Corriger mentioned Seyoum, Damaka, Demissié, and Ligg Asfaou Ali, along with the native mechanics Amde Work and Kidanèè. There was also an African-American pilot, Robinson, commissioned in the United States, whose activities are rather uncertain.

## The Potez in Action

The Potez 25's operated by Maillet and Corriger were based at the airfield at Dessie from 1930 in support of Haile Selassie's troops during the campaigns against the Ras of Godjam, Hailu Teclaimanot, the Tigre, Gugsä Olie, still supporters of the deposed Emperor Lij Tassie. The Potezs had a key role in the victory of the Negus when, on March 28, they dropped leaflets on the troops of Gugsä, and then assured the rout of the rebels by the low-level release of forty 10-kilo anti-personnel bombs that dispersed a force that was clearly superior to that of the future Emperor.

In July 1931, an Ethiopian Potez 25 was posted to Jijiga in support of the forces of Gabre Mariam, governor of Harrar, who had gathered 12,000 men armed with modern rifles and machine guns to obtain the tribute due from the nomadic Ogaden. This mission reaffirmed Ethiopian sovereignty in the disputed territories.

Meanwhile, Vedel launched a campaign to replace the Potez 25's with Lorraine engines with ones with the

Hispano engine. He would eventually succeed, but it was not a happy decision because the Hispano-engined Potez 25 was known to be nose heavy, making it more difficult to fly, and the engine did not perform as well in the Ethiopian climate as did the Lorraine-powered aircraft. For some time, Maillet resisted the disinformation campaign, but he was finally overcome by a Greek businessman, Balamos, who represented Hispano-Suiza and Fiat. The Emperor paid some 48,000 francs more for three new Potez 25's since the Hispano engine was not included in the price, while the Lorraine was. One of the new Potezs quickly disappeared, since on departure of Corriger for France; only two of them remained.

Vedel was not only disgraced by the failure of his flight schools, but he proved not to be an aviator the same level as Maillet and Corriger. He got lost many times. For example, on easy flight from Djibouti to Addis Ababa it took him five hours when he could have easily followed the path of the railway! On January 17, 1933, his contract was not renewed and he disappeared from the Ethiopian scene.

#### **Non-Combat Duties for the Potez**

On an unknown date, a Potez 25 was needed to fly a doctor to Makalle to be at the bedside the eldest daughter of the Emperor -. Princess Zeneba was sixteen years old and seven months pregnant. Unfortunately, Corriger was sick and it was necessary to find another pilot. The mechanics, who were certainly capable of flying in a straight line, refused because their contract stated they could not fly without the presence of Corriger. The two aircraft chosen for the mission were finally flown by the two best Ethiopian pilots - Babitcheff and Asfao. They arrived safely at Makalle, but found the princess had died. A few days later, Babitcheff returned with the body of the princess. Asfao, who had the princess's husband as a passenger, made a bad landing at Dessie and wrecked his aircraft (Note 4). Both men were uninjured and were subsequently recovered by Corriger.

The Potezs in particular were used extensively to transport important persons and the sick. They were also used to transport tribute, arriving at the capital with boxes full of money.

Flying in Ethiopia was taxing for both planes and men. Taking off from the capital at an altitude of 2,000 meters required an ongoing effort from the engines. Once in the air, even though unfortunate occurrences were not frequent, they remained significant, as when a vulture hit the wing of a Potez being flown by Corriger; largely destroying the flying qualities of the airplane. After a difficult return, it was discovered that the head of the raptor had damaged the wing spar! The climate on the plains was not favorable in the case of an emergency.

The local wildlife and high temperatures did not facilitate emergency landings.

#### **Ethiopia Seeks New Aircraft**

In August 1933, an Ethiopian committee consisting of Lieutenant Babitcheff and Dedjaz Nasibou went to France to purchase new planes. However, Potez did not grant them the low price already promised to Corriger, and the two men went on to buy only one aircraft. (Note 5). Ethiopia acquired, among others, a single Junkers W.33 that arrived with engineer and test pilot Ludwig Weber, who chose to stay in Ethiopia when he was hired by the Emperor to be the head of aviation technical services. Weber was charged at the same time with creating or purchasing a flight training aircraft adapted to the conditions of altitude and heat of the highlands. Inspired by the example of European trainers, he designed and constructed a two-seat low-wing monoplane which was assembled from material imported from Germany. This Nes/Weber made its first flight at the beginning of 1935 from the Foukri airfield at Akaki where it was captured intact by the Italian troops in May 1936. [Ed: See an article on the Nes/Weber elsewhere in this issue of SAFO.]

In addition to the new Potez 25 as already pointed out, Ethiopia bought a three-engine Fokker F.VII/3m with Lorraine engines from Switzerland. On 23 February, 1934, it landed at Addis Ababa with six passengers after a direct flight from Kassala, Sudan, piloted by Swiss pilot Walter Mittelholzer. This aircraft, the largest ever purchased by Ethiopia up to that time, was intended for the Emperor and his retinue. The Potezs, which had been used quite extensively for three and a half years, began to suffer from the Abyssinian climate. In March 1934, the Potez factory received a visit from David Hall, the personal envoy of the Negus. However, the affair remained a dead issue. The following August, the French military attaché noted that the pace of flights by the Potez 25 had declined significantly, and that they were now confined to a few postal or training flights.

As tension rose with Mussolini's Italy, the Emperor tried to acquire more planes, and about ten contacts were made in Europe. A large credit, curiously granted by the 3rd Reich, opened the possibility of buying three Focke-Wulf 56 Stösser fighters, but these could not arrive in time. Finally, two single-engine Fokker F.VII's (Lorraine engine of 450hp) reached the Ethiopian capital on June 14, 1935, piloted by Corriger and Babitcheff. They would be converted to medical transports.

At the same time, the network of airfields was reviewed, and the old track of Janoua Meda, near the racecourse of the capital, was abandoned in favor of the much more modern one at Fouri. It had a 1,500 m long



landing strip in the direction of prevailing winds in addition to two metal hangars. The airfields at Dessie, Gondar, Debra Marcos, Jimma, Jijiga, Dire Dawa, Wollamo, and Soddou Bali, also benefited from this wave of modernization, and they preceded the preparation of airstrips in all localities of any importance.

In March 1935, the staff of Ethiopian aviation expanded with the arrival of two new French mechanics: Demeaux and a certain Schlepp, an assembler from the Lorraine factory. In early July, there were only four Potezs: one unserviceable Potez (Hispano), and two Potez (Lorraine) and one Potez (Hispano) still flying, but doing less and less.

In mid-1935, a total of 15 aircraft were to be found in Ethiopia, including nine in flying condition for eight pilots (three French, one German, and four natives). In addition, there were three European engineers assisted by two local assistants. The search for new staff met with little success, and the taste of the Emporer for colorful aviators was quickly squelched by the misadventure of the American, John C. Robinson, who flew just enough on the single Junkers W.33 to damage the landing gear. It was not the very colorful Hubert Fauntleroy Julian who would change his mind. It was Count Carl Gustav von Rosen, lover of Africa and a skilled pilot. The adventurer and mercenary American Hilaire du Berrier tried his hand unsuccessfully to recruit volunteer pilots in Europe to fight in Ethiopia. He who would be captured by the Italians on May 4, 1936, near Addis Ababa.

Other aircraft would arrive in dribs and drabs, including a superb 17 Beech Staggerwing biplane, certainly the fastest biplane of the era. It would retain its U.S. registration to the end, but also carried a superb Amharic cross (Note 6) on the upper left side of the top wing. It arrived in Addis Ababa on October 1935 at the hands of Frenchmen Henri Drouilhet, and it quickly became the favorite of the Emporer. He used it to visit his troops scattered over large distances on journeys of encouragement that showed no lack of courage or panache.. It was onboard this aircraft that Haile Selassie eventually took refuge in Europe. It seems that a second Beech 17 was being acquired by France in February 1936, but it was put under embargo at Villacoublay at the express request of Italian authorities. Thereby, the defection planned by Drouilhet was averted. He had proposed to deliver the aircraft and Emporer Haile Selassie to the Italians at Asmara to collect a reward of fifty million lire. Mussolini had to settle for one plane, confiscated on April 25 after Drouilhet landed at Centocelle.

### **Prelude to War**

A month before the war began in on 13 October, 1935, the Italian intelligence reported the presence in Addis Ababa of eight new European mercenary pilots, including

seven Greeks (Note 7) and a Russian, Ziatko Dimitrievitch, all of whom arrived in July 1935. So there would be more pilots than aircraft available, (Note 8) The stock of projectiles stored at Ghebbi was limited to what remained of the original 200 10-kilo bombs and some 20,000 machinegun cartridges.

The outbreak of Abyssinian War made the situation of the French government rather delicate since three of the four Frenchmen in Ethiopian service were on military leave. On November 27, Demeaux requested to be allowed to remain in Ethiopia, where he remained until the occupation of Addis Ababa by Italian forces. During the third week of November, Corriger flew the Emporer to Jijiga in a Potez 25, then back to Dire Dawa . The Negus's desire to have him fly on to Dessie faced the veto of French authorities. Corriger took leave of the Emporer on November 30 before taking the train to Djibouti. The squadron passed to the command of Babitcheff, with the non-operational assistance of Weber, who would narrowly escape capture and manage to flee to the Sudan.

The International Red Cross, justly concerned about the consequences of this unequal conflict, contributed to the Ethiopian resistance a Fokker F.VII flown in by Count Carl Gustav von Rosen (Note 26), a pilot of the Swedish army put on "permanent availability." He arrived as the head of a humanitarian flight bringing food and medicines. He would act throughout the conflict evacuating an uncertain but very large number of wounded in often very dangerous conditions, and using, like Babitcheff, taking on board a local guide to avoid getting lost in the lunar landscape of the highlands. He would endure many bombings by the Italians who paid no attention to the red cross painted on his plane. It was during one these attacks that von Rosen suffered burns caused by mustard gas.

Apart from the Swedish Fokker, if we believe unproven rumors, another Swedish plane operated in Ethiopia with the national insignia of the three crowns covered by green-yellow-red bands, while still keeping its original red crosses. The British Red Cross began preparations to convert a de Havilland Dragon for medical duties. (Note 10) It would have been flown to Ethiopia by Commander Fellowes, famous for his flyover of Mount Everest in 1932. However, it was still at Croydon, England, when Ethiopian forces collapsed early in 1936.

The small number of aircraft did not prevent them from being highly decorated. For example, one of the Potez 25, named the "The Lion of Judah" (Selassie's nickname) had on its fuselage an inscription in Amharic meaning "Bird of the Crown Prince". Other inscriptions that appeared on the fuselage of at least one of the Fokker F.VII's and on the Farman F.190 remain rather enigmatic.

Too few, poorly armed, led by a staff with little experience, the Ethiopian air force did not constitute any danger to the Italian air force, nor for enemy troops. They

would leave the task of destroying Italian planes to thirty-six 20mm Oerlikon anti-aircraft guns purchased with a special loan of 350,000 marks approved by Adolf Hitler himself. These guns arrived at Djibouti among other

German arms shortly before the beginning of hostilities aboard the British steamer *Santa Maria*.

### Notes

1. More precisely a Potez 25.53.
2. His contract expired on November 28, 1934, but was renewed thanks to the help from the Lorraine company.
3. Son of a White Russian émigré and a noble Waizero.
4. This is undoubtedly the Potez (Hispano) missing from the later list.
5. Among which was, apparently, the single Comper Swift.
6. Essentially a red cross on a white square with the inclusion of a gold

- Star of David in the center of the (yellow) cross (of David).
7. These would be three officers: Panaiotisly Nouscropoulos, Alkibiades Papourkerios and Jan Minasagazar.
8. The only source mentioning this reinforcement is very vague and difficult to accept.
9. Son of a World War I flying ace and nephew of Karin Göring, wife of Hermann Göring, but considered the

- black sheep of the family. He was first an aerial acrobat before dedicating his life to humanitarian aid. He will forever be famous for his brave aid to Biafra, before being killed in 1977 in the Ogaden by Somali guerrillas.
10. G-ACKD - later used for monitoring oil pipelines in Iraq.



Le Potez à moteur Lorraine, « 3 » blanc avec une inscription en amharique.



Le Potez à moteur Lorraine, « 1 » blanc.

# Meindl/van Nes A-VII (M7)

Rudolf Höfling

[Editor: This article is a excellent compliment to the review of the book on the Italian campaign in Ethiopia 1935/1936 published elsewhere in this issue of SAFO. In an excerpt from this book, mention is made of Meindl/van Nes A-VII in Ethiopia. The following article describes the development of the A-VII in Austria and its subsequent career in Ethiopia. This article first appeared in the August 1998 issue of *Insignia Magazine* and is reprinted here with permission of the author and the editor of *Insignia Magazine*.]

At the beginning of the 1930s Dipl. Ing. Wilhelm van Nes was employed by the Austrian aircraft company Meindl Flugzeugbau in Linz on the Danube. The second aircraft designed by this company was the Meindl/van Nes A-VII (M.7), a sporting/touring aircraft. Together with the owner of the company, Ob. Ing. Erich Meindl, van Nes began work on this machine in November 1931. Primarily intended for touring and as a trainer, the aircraft was created with low cost, low maintenance and low insurance as selling features - it was also thought necessary to use a low-rated engine that consumed little fuel. As originally designed, the A-VII was intended to be powered by a 40hp Salmson radial engine, to give the aircraft a top speed of 144 km/h (89.4 mph). For touring, the A-VII was to have two luggage compartments. Long distance journeys were to be accomplished with the addition of a 95 litre fuel tank in the second cockpit, increasing the flying time from 4 to 9 hours, and achieving a maximum range of 1,300 km (808 miles). Plans were also made to enable the A-VII to be equipped with floats.

Van Nes reworked this concept and in 1932/33 the company built an improved version of the A-VII. The company bought an 80hp Armstrong-Siddeley Genet IIA radial engine from the Junkers company in Dessau, which was fixed to the A-VII in July 1933. The A-VII made its maiden flight on 8., August 1933 shortly after 5 PM with van Nes at the controls.

At the end of September 1933, the Austrian Air Ministry assigned the registration A-138 to the A-VII, with van Nes and Meindl as the registered owners of the machine.

A promotional tour to demonstrate the A-VII began in August 1933, and visits were made to Munich, Würzburg and Freiburg im Breisgau in Germany. Several German pilots, including some from Junkers, flew the A-VII, and were mostly satisfied with its flying characteristics. The A-VII returned to Linz on 5 May

1934, having completed around 60 flying hours, and was then used for advertising flights, clocking up a further 51 hours.

In September 1934 the A-VII was overhauled, receiving some modifications and - following a new Austrian law - the new registration OE-DOL. In 1936 the aircraft was bought by Linz City Council and loaned to the Moorfliegertruppe 351 aeroclub. The occupation of Austria by Germany led to OE-DOL receiving the German registration D-EDOL.

The second A-VII to be built was sold and delivered in kit form to the Imperial Government Workshop in Addis Ababa, Ethiopia. The German Ing. Ludwig Weber was the personal pilot of Ethiopian Emperor Haile Selassie, and converted the kit of the Meindl/van Nes A-VII to suit Ethiopia's geographic and weather conditions. Addis Ababa lies about 2,500m above sea level, and one modification required was the addition of flaps over the entire wing. Other modifications included landing flaps and the installation of dual cockpit control. The first engine that Weber installed was an 80hp Walter NZ 80 seven cylinder radial. The steel tube frame was welded by a mechanic from Junkers, and the wings were constructed by a German joiner with experience of sailplane building. Extra parts for the A-VII were ordered from Germany, including the undercarriage, and a two bladed propeller from Schwartz. Other work was carried out by untrained Ethiopian ground staff and without technical aid, overseen by Weber.

Named *Ethiopia 1*, the A-VII was painted Silver overall, with the Ethiopian national colours of Red, Yellow and Green on the wings. The name *Ethiopia 1* was painted in Black on the rudder in both English and Amharic script. The fuselage bore the name *iSahai* (the word means sun, but could also have been an Ethiopian princess) in Black, and in Amharic script only.

The maiden flight of this aircraft was in either December 1935 or February 1936. A further engine was installed, this being an uprated 115hp Walter NZ radial, and with this powerplant the, A-VII reached a top speed of 230-240 km/h (143-149 mph). Take off distance was 150 m, and landing was accomplished in 100 m without brakes. The A-VII proved to be maneuverable in flight but also very sturdy.

Due to the invasion of Ethiopia by Italy in October 1935, flight time was limited and only 30 hours was clocked up by the A-VII. On 3 May 1936, Ludwig Weber was forced to abandon *Ethiopia 1* on the airfield at Jan Meda, escaping the country on Haile Selassie's Junkers



W.33c (Serial no. 2539, also named *Dessie*). Three days later the Italians occupied Addis Ababa and discovered *Ethiopia 1* in a workshop at Addis Ababa racecourse.

The A-VII was displayed to the Italian public as war booty at Padua in 1937. It appeared in good condition, though the Silver fuselage had been repainted in Red. After this exhibition, the A-VII was sent for museum display at the Air Force Academy in Caserta. Since 1971 the *Ethiopia 1* has been on view at the Museo Storico dell'Aeronautica Militare Italiana in Vigna di Valle, north of Rome.

Another A-VII was supplied by the Meindl company to the Arado aircraft factory in Brandenburg, Germany, where it was built in 1939. This machine, designated the Meindl/van Nes A-VIIc, was used as a sports aircraft by the NSFK (Nationalsozialistisches Fliegerkorps - National Socialist Flying Corps) in 1943, bearing the German registration D-ENAC. This machine was powered by a 50hp Zündapp inline engine.

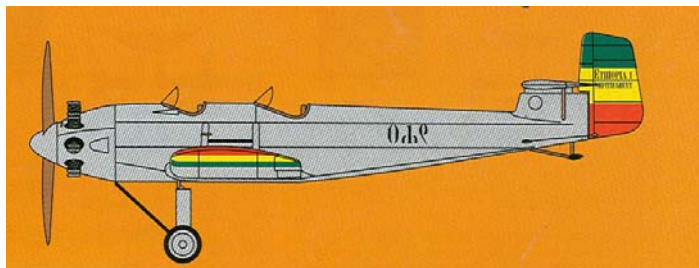
In all, around a half dozen of all variants of the Meindl/van Nes A-VII were built.

### Specifications

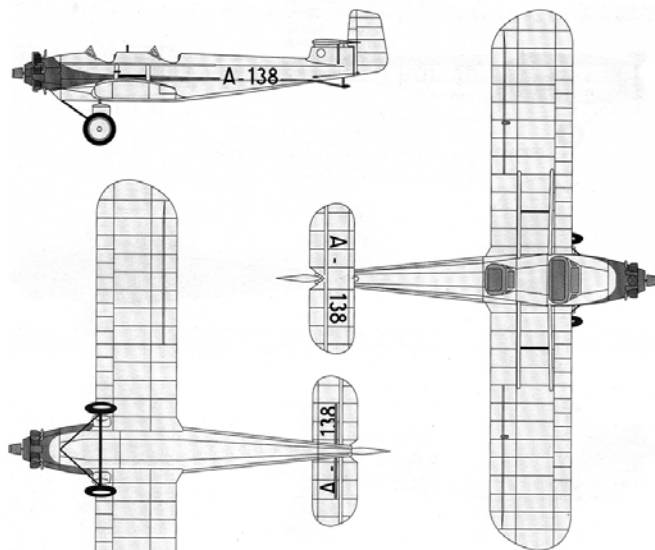
(from a contemporary French source for the *Ethiopia 1*)

Wingspan	10.20 m
Length	7.32 m
Height	2.65 m
Maximum speed	185 km/h
Ceiling 6,000 m	

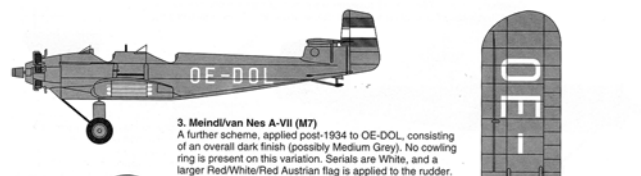
Rudolf Höfling (SAFCH #1590), Austria.



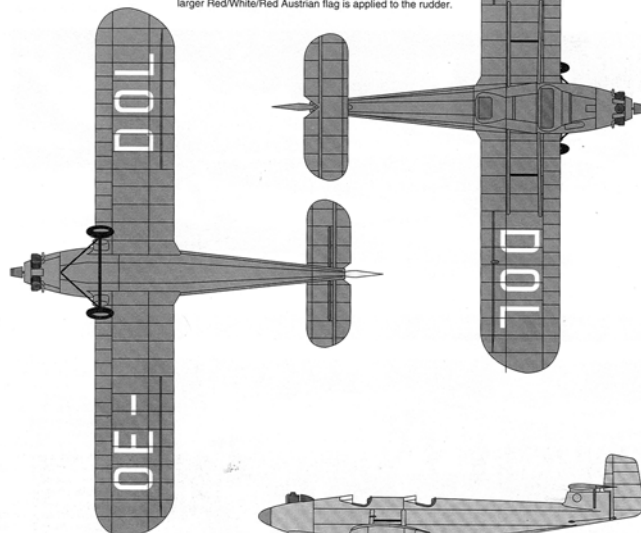
*Ethiopia 1* (*Sahai*), Imperial Ethiopian Air Force, Jan Meda airfield, Spring 1936. This machine is finished in an overall Silver colour scheme. Ethiopian national colours of (from top) Green, Yellow and Red are carried on the rudder and four wing positions. The name *Ethiopia 1* is carried in Latin and Amharic script in Black on both sides of the rudder, and the name *Sahai* (meaning sun) is applied in Amharic script in Black on the fuselage sides. Note the local modifications to this A-VII, including the wing flaps and installation of a Walter NZ-80 radial engine.



1. Meindl/van Nes A-VII (M7)  
Bearing the civil registration A-138, this four view shows the A-VII as it appeared at the end of 1933, powered by an Armstrong-Siddeley Genet IIA radial engine. The A-VII is finished overall in Cream, with Red cowling and fuselage striping.



3. Meindl/van Nes A-VII (M7)  
A further scheme, applied post-1934 to OE-DOL, consisting of an overall dark finish (possibly Medium Grey). No cowling ring is present on this variation. Serials are White, and a larger Red/White/Red Austrian flag is applied to the rudder.



4. Meindl/van Nes A-VII (M7)  
This floatplane version of the A-VII was projected in 1932, but was never actually built. Original drawings suggest that this version was to have been powered by an in-line engine.

# Exotic Birds

Greg Kozak

[Author's note: I have been an avid aircraft modeler for over fifty years. During that time I have grown increasingly enamored with rare, exotic, and odd markings and color schemes. I have also amassed an assortment of over fifty-thousand images. I thought it would be great fun to share some of my most unusual images with other SAFO members. To that end, I have included six of the images from my collection. I plan to submit more in future volumes, and heartily encourage other members to do the same. I hope this will prove to be a long-running series, full of surprises. Any sorts of depictions are welcome- photos, profiles, paintings, drawings, and even verbal descriptions- as long as they are odd, rare, strange, and unusual! Send entries to: gkozak2@verison.net.]

## Dutch West Papua New Guinea Hawker Hunters



Dutch Hunters, one of whose tail is marked with the Dutch West Papua New Guinea flag, were in action in 1961 and 1962. Their opponent was Indonesia.

## Brunei Westland S-55 Whirlwind



The Royal Brunei Air Force was established in 1965. Its first task was flying doctors to rural areas using two ex-RAF Westland S-55 Whirlwinds.

## Central African Empire Caravelle



While images of aircraft of the Central African Republic are relatively common, those of aircraft from the Central African Empire are quite rare. This Caravelle was a personal aircraft of Emperor Jean-Bedel Bokassa.

## Democratic Republic of the Congo Mi-26



The single DRC Mi-26, with Russian fin flash and civil registration number, and an unusual DRC fuselage marking. Refurbished by Skytech Helicopters of Belgium, it spent much time parked at Liège-Bierset airport.

## Tanganyikan Government Aero Commander



A Tanganyika government Aero Commander. Tanganyika merged with Zanzibar in 1964 to become present-day Tanzania. Images of aircraft from Tanganyika are extremely rare.

## Kurdistan Regional Government Bell 212



A Kurdistan Regional Government Bell 212 used for VIP transport, marked with the coat-of-arms. Mi-8 Hips registered in Moldova were previously used in this role.



# Bolivian Junkers F-13 for the Modeller

Nils Treichel

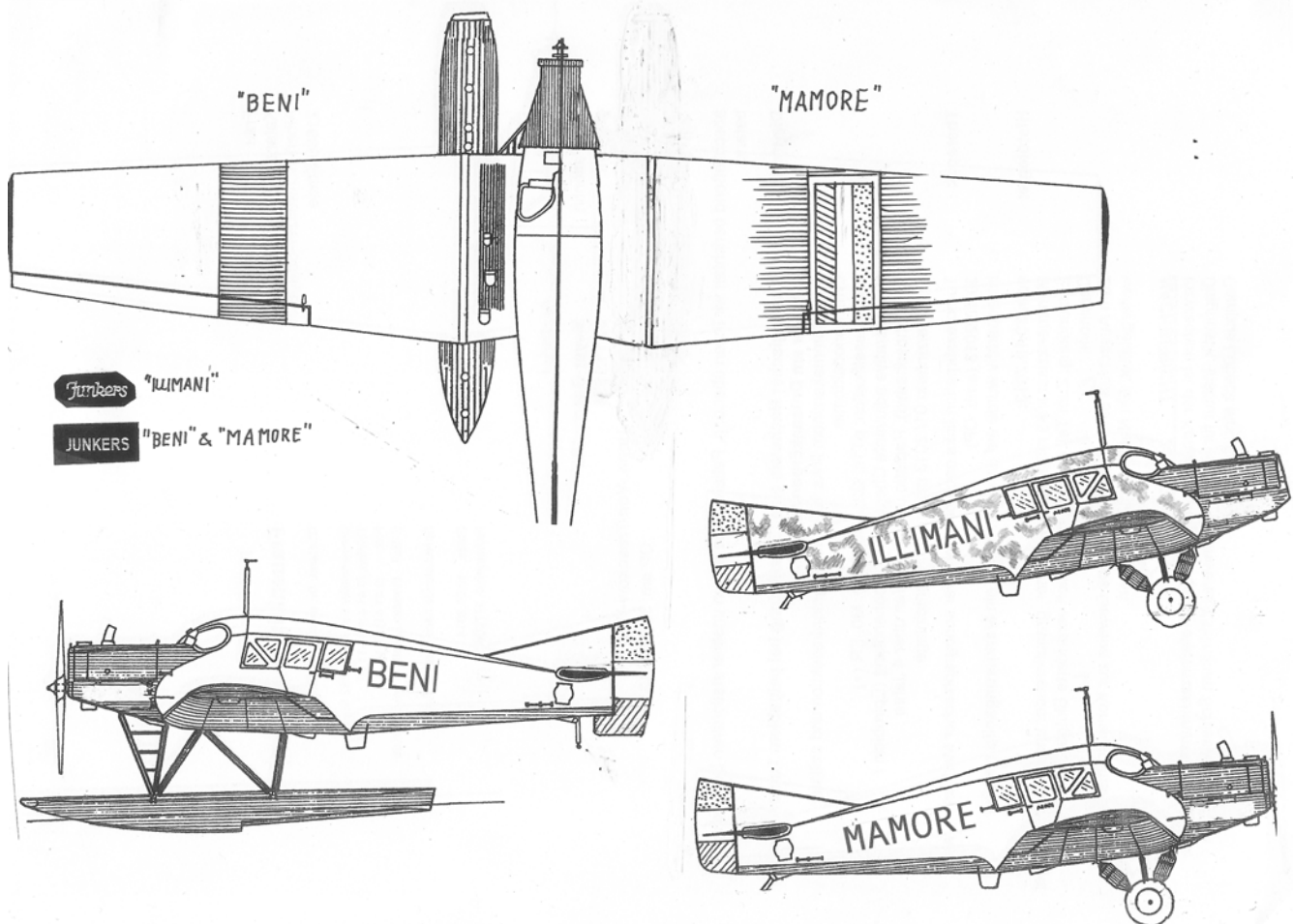
[Author's note: This is not about the history of the Junkers F13s in Bolivia. For this I refer you to the essential work "Junkers F13" by Lennart Andersson et al, published by EMA books. I'll deal only with those Tin-Donkeys (Or was the F13 known as "tin-llamas" in Bolivia?) used in the Chaco War from a modeller's point of view.]

Altogether nine F13s were used in Bolivia, though not all at the same time. For example, three successive F-13 were called "Beni". All belonged to the civil airline LAB (Lloyd Aereo Boliviano), but were subordinate to the Bolivian Army beginning in March 1928. The standard paint-scheme for the F13s was natural metal on upper sides and black beneath. The engine cover was also black. All Bolivian ones sported the national colours on the rudder, red-yellow-green from top and individual names in black capital letters on the fuselage sides. On the engine's side the name "Junkers" was applied, either block or script style.

I've selected three F13s for presentation: The first one is "Beni" (a department in north-east Bolivia) which was

the third with this name. It is shown here in floatplane configuration and it was the only one to sport the Junkers black-and-silver wing bands. "Mamore" (a river flowing towards the Amazon) is interesting because of the under wing markings. In the book, "The Chaco Air War" it is said, that national colours were also applied in bands to the wings. In the same book is a photo of "Mamore" (name partially covered) where light (silver?) bands with a darker rectangle can be seen beneath the wings. National colours seem to be the best explanation for this pattern and lengthwise orientation the most logical because this was easier to recognize. "Illimani" (the 2<sup>nd</sup> highest mountain in Bolivia) is one of two (the other was "Charcas") that was officially transferred to the Cuerpo Aviacion and so it's no wonder, that it was camouflaged, most probably green splotches. I don't know, if these also covered the black engine cover.

Nils Treichel (SAFCH #1467), Germany.



# INTERFET Aviation in East Timor

Ted Koppel

The INTERFET multinational emergency force was created in response to the extreme violence resulting from a 1999 plebiscite for autonomy in East Timor. East Timor is a former Portuguese colony in the Indonesian archipelago forcibly annexed by Indonesia in 1975. A local freedom movement, the Revolutionary Front for an Independent East Timor, FRETILIN (*Frente Revolucionaria de Timor-Leste Independente*), had been active there since 1974. Among their opponents were the Indonesian military and settler militias.

When the 30 August 1999 referendum overwhelmingly supported total independence, the local pro-Indonesian militias, supported by the Indonesian military, reacted violently, the United Nations plebiscite observer mission UNAMET (UN Assistance Mission in East Timor) had to evacuate its unarmed military observers, police, and administrators from the countryside as well as from the territorial capital, Dili. This, along with evacuation of Australian and some other nationals, was accomplished by RAAF and RNZAF C-130s, as "Operation Spitfire", possibly aided by other forces, as well as UNAMET's own air assets. Amid the devastation and bloodshed which reportedly cost thousands of lives, hundreds of thousands of East Timorese became refugees on the island and elsewhere.

On 15 September; the United Nations Security Council authorized an interim multinational military and humanitarian force to help stabilize the situation. This was INTERFET (International Force East Timor) to be led by Australia and to operate until a more adequate, armed United Nations mission could be assembled. (Such non-UN interim emergency forces have also been previously sanctioned by the UNSC for operations elsewhere.) INTERFET's D-day was 20 September 1999.

With a total of some 11,000 personnel, the nations eventually (and with contingent changes) contributing

were: Argentina, Australia (lead and bulk of force), Bangladesh, Brazil, Brunei (? possible error), Canada, Denmark, Egypt, Fiji, France, Germany, Ireland, Italy, Jordan (at very end), Kenya, South Korea, Malaysia, Nepal (indirectly?), New Zealand, Norway, Pakistan, Philippines, Portugal, Singapore, Sweden, Thailand, UK, and USA. The standard composition was approximately 20 nations at any one time. As Timor is an island, many naval forces took part, averaging a total of about 30 ships. While Australia's name for INTERFET and its wide-ranging support elements in Australia was "Operation Warden", its name for the INTERFET mission specifically on Timor was "Operation Stabilise." Apparently several participating nations also adopted the latter designation; although it is likely others had their own official term for their troop contribution. For example, Canada called its deployment "Operation Toucan"

On 28 September, UNAMET was re-established in mostly-destroyed capital of Dili, with plans progressing at DKPO (UN Department of Peacekeeping Operations) headquartered in New York to form UNTAET (UN Transitional Administration in East Timor) for when the crisis had been calmed.

Over the next five months INTERFET was involved in clashes with the pro-Indonesian militias, especially on the border with West Timor, while delivering essential supplies (often airdropped) to the civilian population, facilitating communications, resettling refugees, and so on. Eventually, on 23 February 2000, the mission was handed over to UNTAET, a 23-nation peacekeeping force.

On 20 May 2002 East Timor gained its full independence as Timor-Leste. On 31 May, UNTAET was replaced by UNMISSET (UN Mission of Support in East Timor) which ended in May 2005. Unfortunately, subsequent political crises have necessitated further international intervention on that part of the island.

## Aircraft of INTERFET

This table covers the overlapping Operations "Stabilise" and "Warden." A variety of references was used for this non-comprehensive compilation, so more details are still needed.

### AUSTRALIA

Air Force	Boeing 707 tanker	(3)	33 Sqn element
	Boeing F/A-18 Hornet	(12)	81WGDET, 75 Sqn element
	Dassault Falcon 900	(1)	34 Sqn element
	DHC-4 Caribou	(3)(+1?)	86WGDETC [see below]
	General Dynamics. F-111 and		
	RF-111C Aardvark	(10)	82WGDET [see below]
	Lockheed C-130E/H Hercules	(13)	86WGDETB [see below]
	Lockheed P3C Orion	(5)	92WGDET [see below]
	Pilatus PC-9	(3)	81 WGDET, 77 Sqn element

Army	Beechcraft 200 KingAir	(3)	172 Surv Sqn, 1 Avn Rgt
	Bell 206B-1 Kiowa	(3)	762 Recon Sqn, 1 Avn Rgt
	Bell UH-1H Iroquois	(?)	171 (GS)Sqn
	Sikorsky S.-70A Black Hawk	(?)	B Sqn, 5 Avn Rgt
Navy	Eurocopter AS.350 Squirrel	(1)	(HC)723 Sqn (on HMAS <i>Tobruk</i> )
ADF/civilian Charter	Antonov An-12 Cub	(2)	(from Hevi Lift, PNG)
CANADA			
Air Compo	Lockheed C-130E Hercules	(2)	8 Wing
Naval Compo	Sikorsky CH-124 Sea King	(2)	443 MH Sqn, HMCS <i>Protecteur</i>
FRANCE			
Air Force	Lockheed C-130H Hercules	(3)	(4) (via supply ship <i>Sirocco</i> ) FNS frigate <i>D'Vendemaire</i>
Army	Aerospatiale AS.532 Cougar		
Navy	[ ? helicopters ]	(?)	
GERMANY			
Air Force	Transall C.160D	(2)	
ITALY			
Air Force	Alenia G.222	(2)	46° <i>Aerobrigata</i>
	Boeing 707 T/T	(1)	14° <i>Stormo</i>
	Lockheed C-130H Hercules	(1)	50° <i>Gruppo</i>
Navy	Augusta S-61 Sea King	(3)	on landing ship <i>San Guesto</i>
	Augusta-Bell AB.212	(1)	“
	Sikorsky SH-3D	(?)	[actually same a/c as above?]
NEW ZEALAND			
Air Force	Lockheed C-130H Hercules	(2)	40 Sqn
Army	Bell UH-1B Iroquois	(6)	3 Sqn (2 detachments)
Navy	[ ? helicopters ]	(?)	on frigate HMNZS <i>Te Kaha</i>
PHILIPPINES			
Air Force	Lockheed C-130 Hercules	(2)	on assault ship PN <i>Cebu City</i>
Navy	Bolkow Bo 105C	(1?)	
PORTUGAL			
Navy	Westland Mk.95 Lynx	(1?)	
SINGAPORE			
Air Force	Lockheed C-130H Hercules	(1)	[2 week deployment only]
Navy	[ ? helicopters ]	(?)	[any on 2 landing ships?]
THAILAND			
Air Force	Lockheed C-130H Hercules	(?)	
UNITED KINGDOM			
Air Force *	Lockheed C-130K Hercules	(2)	[initial troop deployments]
	Vickers VC-10	(1)	
UNITED STATES			
Air Force	Lockheed C-5 Galaxy	(3)	517 Exped. Airlift Sqn
	Lockheed C 130 Hercules	(3)(+?)	
	Lockheed C-141 Starlifter	(1?)	
Marine Corps	Bell AH-1 Sea Cobra	(4)	[see also the ** below]
	Bell UH-1N Iroquois	(2)	“
	Boeing CH-46 Sea Knight	(12)	“
	Sikorsky CH-53D Sea Stallion	(6)	“
USN/civilian charter ***	Mil Mi-17 Hip	(2)	
	Mil Mi-26 Halo	(2)	

## Notes

\* There is a die-cast model of a Harrier GR.Mk 7 labeled "RAF No 1 Sqn, East Timor, Operation Warden, 1999." But the RAF already had an "Operation Warden" as part of enforcing the no-fly-zone over northern Iraq in the early 1990s, flying out of Incirlik AB in Turkey.

\*\* These USMC helicopters of the

Marine Medium Heli Sqn. 265, 31st Marine Expeditionary Unit (MEU/SOC = Special Operations Capable), were originally from the amphibious assault ship *USS Bellau Wood*, which was replaced here by its sister ship, the *USS Peleliu*, carrying the 11th MEU with Marine Med. Heli. Sqn. 185.

\*\*\* Due to U.S. Navy redeployment requirements, they had to find replacements for some of their obligations to support Operations "Stabilise/Warden." The Moscow charter of these four Mils reportedly cost \$10 million.

### INTERFET air units

The "INTERFET Combined Airlift Wing (ICAW)" consisted of seventeen aircraft, with fifteen C-130s provided by Australia, Canada, France, New Zealand, Thailand, UK, and USA, plus the two German C-160s. All these four-engine transports were based in Darwin, Australia, "for security reasons."

"ICAW, Forward Support Group" contained the two Italian G.222s, an unnamed supposedly Canadian twin-engine aircraft, and the three (later four) Australian Caribou of "86WGDETC" (86 Wing Detachment "C," with elements of 35 and 38 Squadrons). Perhaps these Caribou are the "Canadian" referred to here?

From the main listing for RAAF, "86WGDETB" is the 86 Wing Detachment "B" with 36 and 37 Sqn elements. Similarly "81WGDET" has elements of 75 and 77 Sqns, "82 WGDET" with 1 and 6 Sqn elements, and "92WGDET" with parts of 10 and 11 Sqns. Perhaps the smaller aircraft also constituted an international air unit?

### Other aviation

UNAMET aircraft types noted at that time included newly arrived SA.315 Lama and SA.330 Pumas of Chile Army Aviation, plus Mi-8 and various other Hips. (Portuguese AF Alouette IIIs for UN were due to arrive soon.)

Beyond the two civil contracts by the militaries noted above, others were utilized by humanitarian organizations in Timor. Manunggal Air, under control of the Indonesian Armed Forces HQ's Foundation, supplied Transall C-160s for UNHCR (United Nations High Commissioner for Refugees), ICRC (International Committee of the Red Cross), and other international relief organizations. A chartered Puma from Papua New Guinea's Hevi Lift was also used.

The Indonesian AF (TNI-AU) still had personnel at Dili's Komoro Airport when INTERFET Special Forces landed there; the Indonesians reluctantly agreed to cooperate and help provide security. (Prior to the launch of the mission in September, TNI-AU Hawk Mk 209s over

Timor had intercepted patrols by RAAF F-111 Aardvarks and F/A-18 Hornets.) Later cooperation with INTERFET allowed the Hawks and OV-10 Broncos stationed in West Timor for the emergency to return to their original bases elsewhere in Indonesia.

### Transfer of mission back to UN

Some INTERFET contingents or portions thereof remained in East Timor for varying durations as part of the expanded UN force. This process has commonly been termed "rehatting," for the official ceremony in which parade formations remove their national headgear and put on the UN blue berets, and later added the UN sleeve insignia, usually in these cases on an armband. (This "rehatting" of emergency forces has been employed elsewhere, as in Somalia, Haiti, Liberia, etc., the most recent example being in Mali.) In the case of vehicles and aircraft, large black-on-white square decals are applied onto the camouflaged surfaces.

Among the INTERFET aircraft stay-overs in 2000 were two RAAF Caribou, some RAAA Kiowa and Black Hawks, a few RNZAF Hueys, and Canadian Forces naval Sea Kings.

### INTERFET emblems and markings

#### Illustrations on page 100

Unlike on most other multinational missions, there seems to have been no common aircraft marking. It is possible that a few individually unauthorized instances may have occurred (beyond the "zapping" of the two Italian AF G.222s with a large, waving Australian flag and the subdued version the official kangaroo insignia without surround).

The authorized INTERFET emblem, in one version on the white mission flag, was in slightly altered form worn on the left sleeve of uniforms, usually with an individual national flag above it. There were two variations of the ICAW unit emblem (different lettering), and a RAAF adaptation for the 82 Wing F-111 unit (showing the aircraft silhouettes on the wide border). Perhaps other units did something similar. Other specifically national ones include "Operation Stabilise / Italian Air Force," depicting a G.222, and the Canadian Armed Forces "Operation Toucan" for 443 MH Sqn.

(Note that the Canadian one employs the light-blue UN wreath on a white background, so it could have been for the follow-up UNAMET mission. However, other nations have in the past used portions of UN symbology to indicate non-UN, though UN-sanctioned, peacekeeping operations. In the present case, even the US INTERFET-support emblem used the UN wreath as part of its design.)

While most of the insignia shown are the cloth

embroidered ones, at least some existed as decals. The Italian "Operation Stabilise" one seems to be of the latter kind. The fact that a photo of it shows all the red color sun-bleached out of it could mean that it was displayed outdoors, perhaps on signage, or even on an aircraft.

Ted Koppel (SAFCH #118), USA.

## MULTINATIONAL MISSIONS NOTES: INTERFET (1999-2000)

*Some aviation unit emblems:*



ON FLAG



INTERNATIONAL AIR WING



AUSTRALIAN



ON UNIFORMS

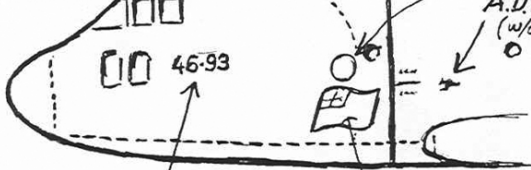


CANADIAN

ITALIAN



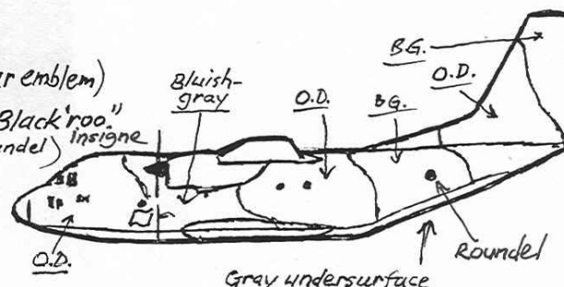
ITALIAN A.F.  
G.222



"46-93" in gray  
"46-91" (also with flag)

(unclear emblem)  
A.D.F. "Black'roo."  
(w/o roundel) Insigne

Waving AUSTRALIAN flag



Gray undersurface

T.K. 2013

Peace/Force Project, T. Koppel (SAFCH #118), U.S.A.





**El Vuelo del Cóndor: Fuerza Aérea Argentina, 1912-2013 Cien Años Protegiendo Nuestro Cielo**, Executive Editor Pascual Caminiti, Editorial de Arte, Esquiú 3034, Quilmes, Buenos Aires, Argentina 2012. ISBN 978-987-22106-6-2) editor@editorialdearte.com.ar.

This large-format, hard-bound, 248 page, Spanish-language volume was prepared by a team of FAA and civilian contractor specialists to celebrate the centennial of Argentine military aviation and the organizations that grew into the present-day FAA. It has all of the predictable characteristics of an 'official' document of its kind, because the originators clearly had access to the entire archive of the Argentine Air Force. As a consequence, it contains a number of remarkable images and formal organizational capsule histories not found elsewhere. It is a quality publication and, as my copy was presented as a gift, and there are no indications as to whether or not it is obtainable commercially or at what cost, it may in fact have had a relatively small print run.

For readers of this journal, the book offers a combination of excellent imagery (270 black-and-white or sepia and 315 color), including illustrations of many unit insignia not easily found elsewhere. Many of these are most welcome indeed, commencing as early as the inside front cover, a large black-and-white image showing six Dwoitine D.21C-1s in flight formation (including serials 5, 10, 19, 24, 30, and 31 – confirming for this reviewer

several for the first time). The photo reproduction is generally excellent, and some of the images are very revealing. A wonderful lineup, an over-head panorama view on page 46 shows no fewer than 61 aircraft at the *Escuela de Aviación Militar* on July 9, 1941 and, to my surprise, still showed two Dewoitine D.21s (serials 33 and 37), NA-16-1Ps, Northrop 8A-2s, Curtiss *Hawk* 75-O's, Curtiss *Hawk* III's and Focke-Wulf Fw-44s amongst other types. Page 90 reveals a Martin 139WAA, B-508 with some sort of nose art or unknown unit insignia and what appear to be high-visibility markings banded around the outer wing panels, while assigned to *Regimiento I de Bombardeo* at BAM *Coronel Pringles* in 1946.

The book has an interesting layout, broken into four major sections: 1912-1945, 1945-2012, 1982 (devoted entirely to the Malvinas War) and 1912-2012 (devoted to "Contributions to National Progress"). Within each of these major sections, there are good descriptions outlining organization structure, organic branches, Antarctic operations, air transport activities and accompanying images. The two-page description of the *VI Brigada Aérea* based at Tandil, for example, includes excellent color images of *Grupo 6 de Caza* Mirage series aircraft and a capsule history of the *Grupo*, the very first such description I have seen.

The editors decided to include four pages on civil commercial aviation in Argentina, and included wonderful images of a FAMA DC-6 (LV-ADR, which was, unfortunately, captioned as a DC-4!) and an *Aeroposta Argentina* DC-3 in full colors and markings, L:V-ACY which was new to this reviewer.

This is an important contribution to the history of aviation in Argentina, and the editorial team is to be congratulated on assembling a coherent and enjoyable work. Recommended for anyone that reads SAFO. The copy I have was generously presented to me by Sr. Martin Leguizamon and his beautiful young family when they visited me at the Museum of Flight. Dan Hagedorn (SAFCH #394), USA.

**Red Devils Over the Yalu: a chronicle of Soviet aerial operations in the Korean War 1950-53**, by Igor Seidov. Stuart Britton editor and translator. Solihull, UK: Helion & Company Limited, 2014. Tables. Photographs. Notes. Appendices. Glossary. Index. Pp. 598. \$49.95. ISBN: 978-1-9093842-41-5.

"An excuse is the skin of a reason stuffed with a lie." (Billy Sunday, 1914) Igor Seidov's *Red Devils Over the Yalu*: is an excuse for a military aviation history book – and a poor one at that. Seidov is an ardent Soviet aviation enthusiast, but an undisciplined amateur historian, unhelpfully assisted by "Argentine historian" Diego Zampini. This English-language version (translated and "edited" by Stuart Britton) is the third iteration of Seidov's story of how the Soviet MiG-15 pilots won the air war over North Korea by amassing more "victories claimed than the US will admit aircraft lost."

The foundation of his assertion is his unbridled acceptance of North Korean, Chinese, and Russian victory claims as fact while vilifying and denouncing all American and British documentation of aircraft and aircrew lost as fallacious propaganda (i.e., "lies"). By doing so he concludes that the Soviet pilots – who claimed 650 Sabres shot down in two-and-a-half years of combat – won the battle for air superiority against the USAF; a thorough, independent analysis of USAF Korean War records shows 224 F-86s were lost in Korea to all causes. The book lacks totally any source references for Seidov's misinformation, relying instead on Zampini's selective internet research.

Seidov and Zampini's search for substantiated American losses to fulfil the Soviet claims reaches far and wide, occasionally including Japan-based aircraft (other than F-86s) that had accidents on training or functional test flights. Such is their quest to verify every "kill claim" made by Soviet aviators, that Seidov asserts that Captain N. E. Vorobev's 3 February 1951 victory credit – claimed as an "F-94 Starfighter [sic]", which were not deployed to Korea until the next month and not allowed to fly north of the frontlines until January 1953 – was actually "a twin-engine

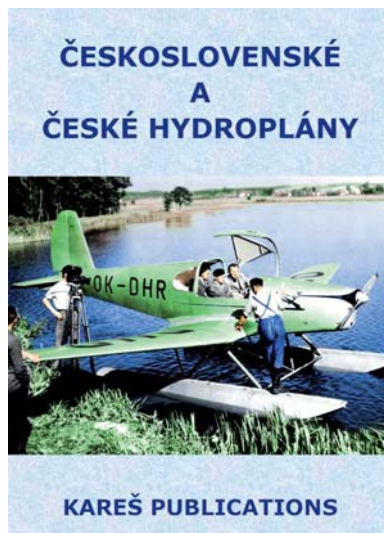
combat training aircraft, the T-33A" that (he alleges) was shot down on a visual reconnaissance mission over Singisiu (his name for Sinuiju) two days later!

As can be imagined from this example, Seidov's technical knowledge, especially of western aircraft, is grossly deficient, crediting the F-86 with an engine "supercharger" that occasionally allowed it to escape MiG attacks and that its A-1C(M) range-only radar was able to locate MiGs in murky weather. He uses an assortment of disconcertingly bogus organizational titles and acronyms, and his geographical knowledge is grossly flawed: Yangste is a river in China, not a location (for a North Korean flight school – that was Yanji, in Jilin Province) and Qingdao (formerly the colonial Tsingtao) is on the coast, not "deep in the interior of southern China." It is erroneous information such as these that ruinously discredits this book.

But between his flawed premise and his false conclusion, Seidov supplies a wealth of detail and data regarding Soviet units, commanders, pilots and operations. His accounting of Russian losses seem accurate and tally well (within 30 per cent) with other sources, including USAF's Official Victory Credits. His book is best when reading the many personal accounts, allowing the Russian commanders and pilots to speak for themselves about their combat experiences.

Seidov's account would have been much better if he had limited himself to presenting the facts of Soviet/Russian side of the conflict – as his title alludes – rather than attempting to convince the reader of the correctness of his opinion. In that case it would have been a very readable and valuable book of about 200 pages. Because it includes approximately 400 pages of misinformation, Red Devils Over the Yalu can only be recommended for the most knowledgeable and discerning readers. For the military historian/enthusiast not yet well-informed on the Korean War, this book should only be read after all other sources have been exhausted.

Col Douglas C. Dildy, USAF (Ret.).



**Ceskoslovenske a Ceske Hydroplany**, by Marcel Kareš.

I would like inform your readers about my new book, "Czechoslovak and Czech seaplanes". The book (384 pages 175 mm by 250 mm, hard cover) describes the history of Czechoslovak/Czech Republic float planes and flying boats. Also covered are foreign machines used or produced in our country, Czech seaplanes used abroad, and visits by foreign aircraft to Czech waters.

The text is accompanied by 392 b&w and 71 color photographs (including 179 photos of Czechoslovak seaplanes used in Yugoslavia). A final section provides color profiles. The text is in Czech only!

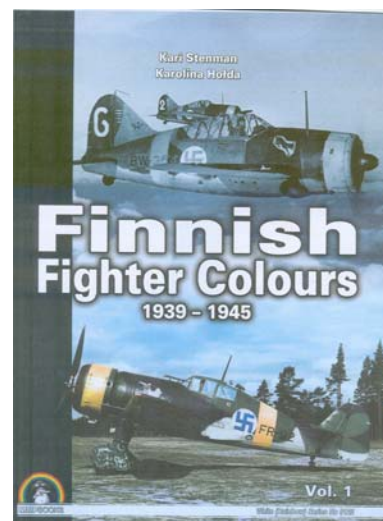
The chapter are:

- (1) Introduction (general information about seaplanes in Czechoslovakia and the Czech Republic).
- (2) Aero A29 (Czechoslovak military floatplane, 1926-1939).
- (3) Letov S.16.J (Czechoslovak military float plane used by the Yugoslav Royal Naval Aviation, 1929-1941).
- (4) Letov S.328.v (Czechoslovak military floatplane, 1935-1939).
- (5) Saunders-Roe A.19 Cloud (British transport amphibious flying boat operated by the CSA).
- (6) FG 227 (German military experimental flying boat built in Prague, 1942-1947).
- (7) Sokol Aircraft M1 with floats (Czechoslovak sports trainer floatplane, 1949-1955).
- (8) Amateur constructions (Czechoslovak amateur floatplane).

(9) Czech seaplanes and helicopters since 1989.

Only 400 copies of this book have been printed. If you are interest in obtaining one, let me know at [mkares@seznam.cz](mailto:mkares@seznam.cz).

Marcel Kareš, Czech Republic.



**Finnish Fighter Colours 1939-1945**

**Vol. 1**, by Karl Stenman & Karolina Holda. MMP White (Rainbow) Series No. 9125. £35 in the UK. Hardback 12 inches by 8.5 inches (310 mm by 215 mm) 208 pages.

This is yet another in MMP's excellent series on Fighter Camouflage during World War 2. I believe that originally only one volume was to be published, but as is so often the way, more and more information came to light. Thus, Volume 2 will be issued at a later date. I'm afraid Bf 109G fans will have to wait a while!

The book is laid out in the standard MMP fashion with each aircraft having a chapter devoted to it divided into an historical and a camouflage & markings section. In each case, whenever possible, the author has included match ups with previous serial numbers and c/ns. There are dozens of rare photographs.

A brief summary of contents is as follows: (1) Bristol Bulldog II & IV - 2 colour profiles. (7 pages). (2) Fokker D.XXI - 22 colour profiles and 2 plan views. (51 pages). (3) Gloster Gladiator - 8 colour profiles (including 2 Swedish) plus one colour plan view. (22 pages). (4) Fiat G.50 - 12 colour profiles and 2 colour plan views. (35 pages). (5) Morane Saulnier MS 406 - 13 color

profiles and 2 colour plan views. This chapter also includes references to and a colour profile of the Morko-Morane. (40 pages). (6) Brewster Model 239 - 19 colour profiles and one color plan view. (41 pages). (7) Appendices: National Markings & Registration Markings; Numbers & Letters; Colours & War Paint Instructions; Table of Colours with FS595 References; and Painting Procedures. (7 pages).

The artwork by Karolina Holda is excellent. All the artwork appears adjacent to an appropriate photograph. There are colour reproductions of some squadron insignias, and for those wishing to correctly reproduce Eino Luukkanen's beer-bottle label 'kill' markings there is a detailed colour drawing!

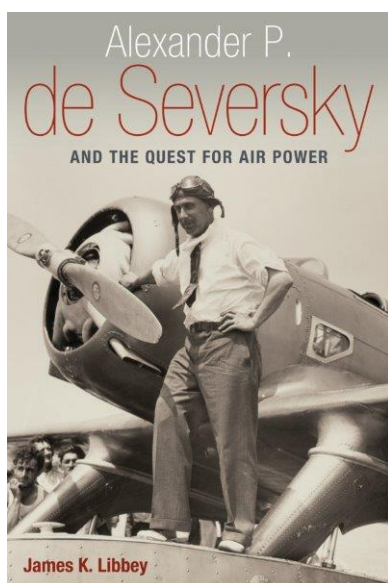
I wasn't aware previously that the MS 406 initially retained their French colours and some of the weird combinations of Italian and Finnish colours for the Fiat G.50 are well reproduced.

Several colour photographs are included in the text although some of these are fairly well known and a few suffer from having been taken when the sun, as it so often is in Finland, was low on the horizon.

The book also contains a 'flyer' illustrating kits of Finnish Air Force aircraft produced MPM Models.

To sum up: Yet again MMP have 'produced the goods' and I eagerly await Volume 2.

Malcolm Barratt (SAFCH #1716), UK.



**Alexander P. de Seversky and the Quest for Air Power**, by James K. Libbey. James K. Potomac Books, Inc. Dulles, VA. 2013. 349 pp. Ill. \$39.95.

This book is the first major biography of this important person who came to the U.S. after flying in World War I as a Russian naval aviator and achieving 13 aerial kills.

It's a well-researched account that occasionally slows down in writing style. I would have liked to have seen more details of de Seversky's World War I engagements. (See Jon Guttman's *Naval Aces of World War I, Part 2*, Osprey, 2012, for more information on the subject.) There are fascinating glimpses of aeronautical society before World War II, and especially of the company de Seversky began that eventually became Republic. But before all that, there was the Seversky Aircraft Corporation that produced several pre-war designs including the SEV-3 floatplane that set performance records and the P-35, the U.S. Air Corps' first all-metal monoplane fighter with retractable landing gear and an enclosed cockpit.

The cover photo shows a smiling de Seversky on the float of an SEV-3. The photo is a great candid view of the smiling Russian aviator in his period saddle shoes, helmet, and goggles. Some of the other photos in the book are familiar; others are not. Many give a good idea of the look and design of a few of the aircraft that de Seversky either designed or flew. Many of the people in his life are also featured.

I have a problem with the author's apparent lack of aeronautical understanding: He notes the SEV-3's "smooth performance", but it actually was a short-coupled, clunky, somewhat underpowered amphibian with massive drag-inducing floats that made it look like something from Flash Gordon's garage. The design did develop into the BT-8, a basic trainer for the Army, 30 of which were built. The BT-8 set a standard for the first specifically-designed basic trainers at a time when biplane trainers were being phased out for fighter training.

While he was an excellent aviator and something of an advanced thinker, de Seversky was no businessman. Though possessed of the best intentions, he could

not keep his company together, and he soon lost control of it. Seversky Aircraft Corporation eventually reconstituted itself into Republic.

Yet, the 1930s were good years for Seversky and his wife, Evelyn, herself a pilot who gained extensive flight time in many of her husband's aircraft. They were part of the period's jet set, living the good life in a mansion on Long Island and rubbing elbows with the elite of the time.

When World War II began, Seversky became something of a prophet predicting events and connecting them to the growth of air power around the world. He wrote a popular book, *Victory through Air Power*, that Walt Disney turned into an animated feature movie. (You can see this unusual film in its entirety on the web.) The movie had mixed reviews, but it certainly got its point across about the value of developing air power, a theme that people like de Seversky and his friend and occasional mentor Army Brigadier General Billy Mitchell ardently espoused. In fact, he dedicated the film, in part, to Mitchell. De Seversky enjoys a featured role, one of the few human characters, in the film as he "lectures" about various points and historical events involving aviation.

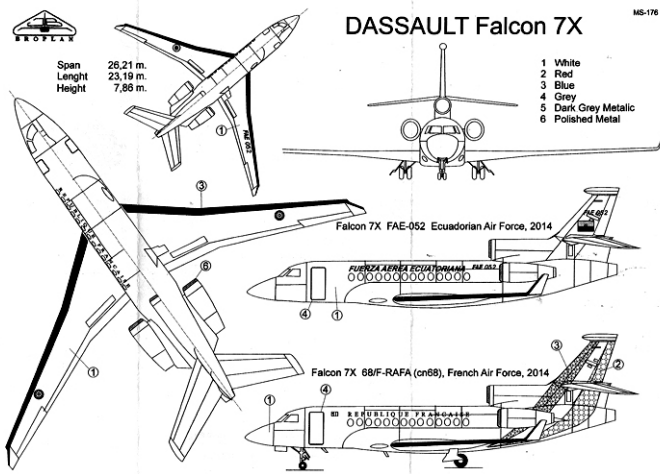
Coincidentally, a new biography of Billy Mitchell, by Thomas Wildenberg, has just been published by the U.S. Naval Institute. Together, these new biographies of two strong aviation personalities of the between-war period provide a very strong picture of the formative years of the U.S. Air Force and how they affected the other services that often competed for public and government attention as well as money. An odd note, is the fact noted by Libbey that Billy Mitchell was both friend and mentor, not only to Alexander de Seversky, but also to future five-star General of the Army, then Air Force, Hap Arnold, who despised de Seversky and did his best to keep him from achieving any degree of success in industry or the Air Force.

Peter Mersky (SAFCH #1355), USA.



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These two recent Broplan kits are in the usual Broplan format. I will comment here on what they have in common: Several (220 mm by 115 mm) sheets of white styrene with well-molded parts and finely-engraved panel lines; two injection-molded sprues with all the small parts; and vacuformed clear cockpit and cabin windows. There is no cabin detail either kit, but the cockpit has lots of parts. The instruction sheets feature multi-view drawings of all aircraft included on the decals (with FS595 equivalents), an exploded construction diagram, and the warnings: "The decal sheet must be sprayed with no less than two coats of clear acrylic before transfer to model" and "The details of decals place over white base." Janusz tells me that the best place to obtain Broplan kits is from the Aviation Megastore in the Netherlands [www.aviationmegastore.com](http://www.aviationmegastore.com). These kits are also available from the SAFCH Sales Service at a price roughly equivalent to that being asked by the Aviation Megastore.



**Dassault Falcon 7X**, 1/72-scale vacuform kit with injection-molded parts and decals. Cat.No MS-176. Broplan, ul. Pilotów 10G/33, 80-460 Gdańsk, Poland.

The Broplan kits of bizjets have been very popular and the Falcon 7X should be no exception. The kit is in the usual Broplan style as described above. Because of the limited size of the vacuform machine, the fuselage is in two parts that are joined behind the wings. The decal sheet (110 mm by 90 mm) provides for two Falcon 7X: **French Air Force** 68F-RAFA (cn 68) 2014 and **Ecuadorian Air Force** FAE-052, 2014.

This kit is not for the inexperienced modeler and it is expensive. The cost from [aviationmegastore.com](http://aviationmegastore.com) is €52.02 which translates to \$67.24. The review kit is available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) is \$60.00 plus p&p.

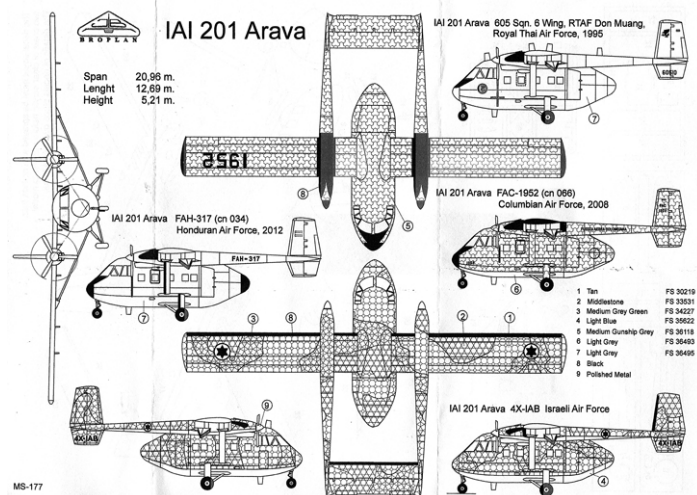
**IAI 201 Arava**, 1/72-scale vacuform kit with injection-molded parts and decals. Cat.No MS-177. Broplan, ul. Pilotów 10G/33, 80-460 Gdańsk, Poland.

The IAI Arava, is very popular with the smaller air forces. Therefore, the Broplan kit will be welcome by modelers looking for an exotic subject to add to their collections.

The kit is in the usual Broplan style as described above. One nitpick: I wish Broplan would stop molding the propeller blades as separate parts, requiring careful alignment and pitch when attaching them to the spinner. If propellers could be molded in one piece, it would save the modeler a lot of grief.

The decal sheet (105mm by 85 mm) provides for four IAI 201 Arava: **Israeli Air Force** 4X-IAB in 3-tone camouflage (Tan FS30219, Middlestone FS33531, Medium Gray Green FS34222 over Light Blue FS35622); **Colombian Air Force** FAC-1852 (cn 066) 2008 (Medium Gunship Grey FS38118 over Light Gray FS36493); **Honduran Air Force** FAH-317 (cn 034) 2012 (overall Light Gray FS36495); and **Royal Thai Air Force** 805 Sqn. 6 Wing, RTAF Don Muang 1995 (overall Light Gray FS36495).

This kit is not for the inexperienced modeler and it is expensive. The cost from [aviationmegastore.com](http://aviationmegastore.com) is €41.28 which translates to \$53.36. The review kit is available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) is \$50.00 plus p&p.



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**Potez 25.53 A2, Serial No. 3. Imperial Ethiopian Air Force.** 1/72-scale decals.

This little decal sheet (90 mm by 600 mm) provides the serial number, inscription, and "Lion of Judah" insignia. It was included in Blue Rider's *Insignia Magazine*, September 1997. If you have a spare Potez kit lying around, it is still

available on the Internet from Blue Rider at [insignismag.com](http://insignismag.com).

**"Insignia Magazine Vol. 2, No. 7.** 36 page A4 magazine with FREE Potez 25 decal sheet. Sample articles: Lohner L40 Flugboot; Gran Chaco Air War - Paraguayan Bombers; Ethiopian Potez 25. Code IN-007. Price: £7.00."

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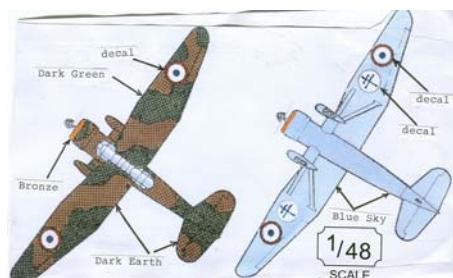
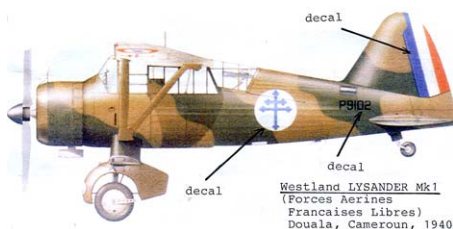


**Mexican Navy Kingfisher** 1/48-scale decals. Antarqui Decals, 757 Emory St., #106, Imperial Beach, CA 91932-2231, USA.

The latest decals from our friends at Antarqui are three in 1/48 scale. The decals for the Armada de Mexico Kingfisher (110 mm by 105 mm) provide the national insignia, rudder stripes, and serial numbers. The serials are printed on the background color (Medium Grey) – if you match your paint to this background color, you won't have to do any intricate cutting around the decals.

The instruction sheets have 2 color photos and b&w multi-views. Unfortunately, the instruction sheet is incorrect in showing B-05 without the hyphen. The decals, however, are correct and have the hyphen in both B-05 and B-06.

These decals are available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) for \$6.00 plus postage.



**Free French Westland Lysander** 1/48-scale decals. Antarqui Decals, 757 Emory

St., #106, Imperial Beach, CA 91932-2231, USA.

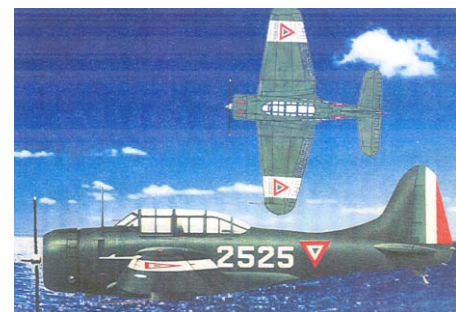
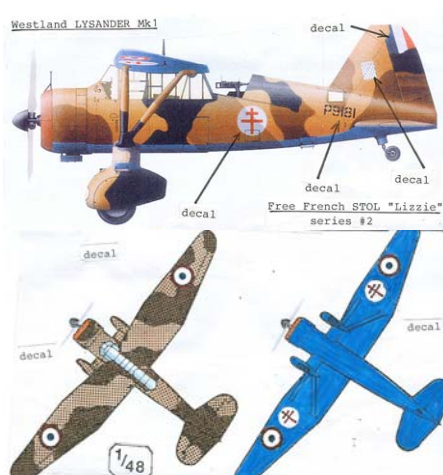
Antarqui has produced 1/48-scale decals for two versions of the Free French Lysander Mk.1. The first is for 'P9102' in a camouflage of sand/dark green over Sky Blue with a blue Cross of Lorraine on the fuselage and red Crosses of Lorraine on the undersides of the wing. The instruction sheet includes a color 3-view drawings, but the view on the underside (also shown here) incorrectly show the crosses in blue. The decal sheet (100 mm by 70 mm) provides the correctly colored crosses as well as all other insignia. The serial numbers are printed over the camouflage color, so you'll have to match your paint to the decals.

These decals are available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) for \$6.00 plus postage.

**Free French Westland Lysander** 1/48-scale decals. Antarqui Decals, 757 Emory St., #106, Imperial Beach, CA 91932-2231, USA.

The second Lysander, 'P9181', is in dark earth/desert sand/dark green over azure blue with red Crosses of Lorraine in all 4 positions. The decal sheet (110 mm by 75 mm) provides all national and unit insignia as well as the serial number. The serial numbers are printed over the camouflage color, so you'll have to match your paint to the decals.

These decals are available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) for \$6.00 plus postage.



**Latin American Dive Bombers.** 1/72-scale decals. Antarqui Decals, 757 Emory St., #106, Imperial Beach, CA 91932-2231, USA.

This Antarqui twin-pack provides decals for two overall olive drab Dauntless dive bombers: one **Chilean** and the other **Mexican**. The decals for the Chilean Dauntless (95 mm by 50 mm) '712' include four serial '712' two national insignia, and blue rudder with white star. The serial numbers appear on both sides of the fuselage and on the port upper surface and starboard lower side of the wing. The national insignia occupy the alternate positions.

The decals for the Mexican Dauntless (92 mm by 75 mm) '2525' provide 4 national insignia (the instruction sheet calls for 6 insignia) and rudder stripes in the national colors. There are also a unit and a personal insignia that are not shown on the instructions.

Although the drawings in the instructions (included here) show radically different shades of olive drab, the background of the serials on the decals is a definite dark olive drab.

This twin-pack is available from the SAFCH Sales Service [safo@redshift.com](mailto:safo@redshift.com) for \$6.00 plus postage.



## -letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-



"The Carmel Valley Airfield is 6 miles from SAFO's editorial office. No, this photo has not been 'photo-shopped'. That's a US-registered Klemm Kl 35D in Swedish AF markings. My sister's house is at the far end of the airfield directly under the final approach of the aircraft. Many an outdoor barbecue was enlivened by the low approach of a Royal Swedish Air Force Klemm coming in for a landing.

"The Carmel Valley Airfield was developed in 1941 as a community where pilots could land and taxi into a hanger attached to their own homes. It was one of the first such airfields in the world. The airfield was closed in 2002 when the land was sold for a housing development."

Jim Sanders SAFCH #1) USA.

"What Ungodly Magick this be? Yesterday, Friday (29 Aug.), in the library I read your previous day's notice of the Oct. SAFO's being sent out this

Wednesday, and when I arrived back home, there it was, waiting in my mailbox! Two days coast-to-coast for non-First Class mail? Can Climate Change cause such a phenomenon - or has the USPS finally perfected their Teleportation Option?

"Be that as it may, #150 is another delight in your dazzling early-birdishness. I was tickled especially rosy by your presentation of additional Afghan photos from Greg Kozak. Most fascinating, indeed.

"As for that new MILITARY AIRCRAFT INSIGNIA book, of which my pre-ordered copy arrived earlier this week, I totally agree with the Jaga review which you quoted, especially regarding the postage-stamp-sized photos. There are several pages where some of the tiny pics could be increased by 150% or even 200% without spoiling the overall design. This seems to be another case where the book-designer, attempting an aesthetic, "clean" appearance, totally ignored the needs of the intended audience. Ah, but perhaps we quibble too much. The overall product is magnificent.

"Speaking of Afghanistan: In the last couple of weeks I've started on my next Multinational Missions project: ISAF (the non-U.S. portion of aviation contributions by some 20 nations). I will now muddle through the mess - I mean mass of over a decade's worth of ISAFishness. ISAFakery? No, ISAFery.

Anyway, it's intended to be fully ISAFO! But now I must hurry home, so that I can read the rest of the issue!"

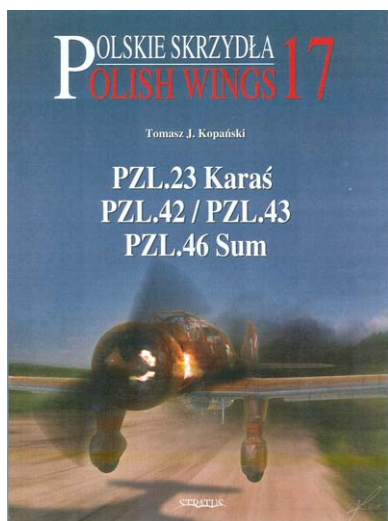
Ted Koppel (SAFCH #118), USA.

"SAFO #150 arrived safely a couple of days after your e-mail announcing its dispatch. Alas, I have only be able to find time to read it within the last few days due to the amount of material that comes through the post at the beginning of each quarter year.

"I must first of all congratulate Frits Gerdessen on his item on the LVA, particularly the completely unknown, to me anyway, collection of early-aviation photographs. I will forgive you the helicopters primarily because it reminded me that I must see if I can find a copy of Patrick Martin's book [at a sensible price] and, secondly the thought of HUP 1-2-3 has a bizarre air of the drill sergeant about it! It goes without saying that Doug Dildy continues to amaze with his KP AF revelations.

"Thank you for printing my attempts at book and decal reviewing, I have included one. of the latest MMP volume to come my way and have taken your subtle hint and expanded it a trifle - thus I ended up with a headache last evening!" Malcolm Barratt (SAFCH #1716), UK.

## -books-books-books-books-books-books-books-books-books-books-



**PZL 23 Karaś PZL 42 / PZL 43 / PZL 46 Sum**, by Tomasz J Kopanski. Polish Wings #17. Published by Stratus. £15-99 in the UK. 88 pages 300 mm x 210 mm [11.5 in. x 8 in.]. Obtainable from rogerw@mmpbooks.biz or www.mmpbooks.biz.

Having bought a model of the PZL 43 some time ago, and on arriving home finding I had no references, I was delighted to see that this profile had been released. The information contained within is purely pictorial and has colour artwork throughout. There are no plans! As far as I can tell, many of the photos are fresh to the market

Air forces covered are naturally

Poland, plus captured aircraft in Luftwaffe markings, Romanian aircraft, and for the PZL 43 Bulgarian. There are quite a few 4 views and all the side views seem to be 1/32 - the style is very like a reduced-size version of the same publishers Fighter Camouflage books, Stratus I believe being an off shoot of MMP. A useful item on the last page is a colour chart quoting FS595 numbers for the Polish, Romanian, and Bulgarian aircraft.

Those with limited access to information on Eastern European aircraft of the period will find this an extremely useful profile.

Malcolm Barratt (SAFCH #1716), UK.



KPAF Yak-18A "White 03" in the Pyongyang "Victorious Fatherland Liberation War Museum". Note that this aircraft also has the belly-mounted bomb shackles, indicating it was probably at one time employed by the 3rd Night Bomber Regiment. (Author's Collection)





The KPAF Yak-18A in the Korean War Memorial Museum in Seoul. While believed to be "White 15" from the 1955 defection, note that it lacks that aircraft's bomb shackles and prop spinner. (Author's Collection)